

# **History and Progress Report**

## **NOAA Climate & Global Change Postdoctoral Program**

### **Introduction**

The NOAA Climate and Global Change Postdoctoral Program appointed its first class of fellows in 1991. The program was envisioned and sponsored by the NOAA Office of Global Programs, Director, J. Michael Hall. The primary objective of the program remains to help create the next generation of researchers needed for climate studies. During the first year of the program, the steering committee was charged to make appointments to scientists who would study in two particular areas: Climate Modeling and Model Diagnostics and Tropical Ocean Global Atmosphere.

In 1992, with more refined objectives for the program, the steering committee made appointments to those scientists interested in supporting research on mechanisms of climate variations on time scales of seasons to centuries. The overall goal is to provide predictions and assessments of global climate change on seasonal to centennial time scales.

In 2004, Chester J. Koblinsky, was named director of NOAA OGP. OGP current name is Climate Program Office (CPO). Several program managers from CPO have acted as liaison with the UCAR Visiting Scientist Programs in administering the program. Those managers have included Kenneth Mooney, Michael Patterson, Lisa Dilling, and Jim Todd.

## **1991**

Members of the first steering committee for this program included:

John Young (Univ. of Wisconsin, Madison) Chairman  
Robert Toggweiler (Princeton/GFDL)  
Steve Esbensen (Oregon State Univ.)  
Ed Sarachik (Univ. of Washington)

Although appointed, Robbie Toggweiler was unable to serve on the committee. The other three members of the committee met for the first time on 11-12 April 1991 in Madison, Wisconsin to review 57 postdoctoral applications. We received 28 host applications. Eight appointments were made.

The 1991 appointees are as follows:

### **Class 1**

#### **Mark Chandler**

*Research Topic:* Climate Modeling  
*PhD Institution:* Columbia University  
*Host:* David Rind, GISS

#### **Xingjian Jiang**

*Research Topic:* Climate Modeling  
*PhD Institution:* University of Illinois  
*Host:* Inez Fung, GISS

#### **Zhengyu Liu**

*Research Topic:* Climate Modeling  
*PhD Institution:* MIT/WHOI  
*Host:* George Philander, Princeton University/GFDL

#### **Victor Magana**

*Research Topic:* TOGA  
*PhD Institution:* UCLA  
*Host:* Peter Webster, UCLA

#### **Richard Williams**

*Research Topic:* Climate Modeling  
*PhD Institution:* University of East Anglia  
*Host:* Carl Wunsch, MIT

**Jiayan Yang**

*Research Topic: TOGA*

*PhD Institution: Florida State University*

*Host: David Neelin, UCLA*

**Jun-Ichi Yano**

*Research Topic: TOGA*

*PhD Institution: Kyoto University*

*Host: Jim McWilliams, NCAR*

**Chidong Zhang**

*Research Topic: TOGA*

*PhD Institution: Pennsylvania State University*

*Host: Mike Wallace, University of Washington*

## **1992**

The steering committee met to review applications on 15-16 June 1992 at UCAR in Boulder.

Members of the 1992 steering committee included:

John Young (Univ. of Wisconsin, Madison) Chairman  
Otis Brown (Univ. of Miami)  
Steve Esbensen (Oregon State Univ.)  
Ed Sarachik (Univ. of Washington)

Otis Brown (Univ. of Miami) was appointed to the committee as Toggweiler's replacement. The Committee reviewed 106 postdoctoral applications. There were 44 host applications, 12 from NOAA laboratories.

In the second year of the program, only six appointments were made.

The 1992 appointees are as follows:

### **Class 2**

#### **Meghan Cronin**

*Research Topic:* TOGA  
*PhD Institution:* University of Rhode Island  
*Host:* PMEL, M. McPhaden

#### **David Keith**

*Research Topic:* Climate Modeling  
*PhD Institution:* MIT  
*Host:* NCAR, P. Rasch

#### **Wieslaw Maslowski**

*Research Topic:* Climate Modeling  
*PhD Institution:* University of Alaska  
*Host:* Naval Postgraduate School, A. Semtner

#### **Richard Seager**

*Research Topic:* Climate Modeling  
*PhD Institution:* Columbia University  
*Host:* Lamont-Doherty, S. Zebiak

**Sabrina Speich**

*Research Topic:* Climate Modeling  
*PhD Institution:* Univ. Pierre et Marie Curie  
*Host:* UCLA, M. Ghil

**Duane Waliser**

*Research Topic:* Climate Modeling/TOGA  
*PhD Institution:* Scripps Institution of Oceanography  
*Host:* UCLA, R. Mechoso

## **1993**

The Committee met in Miami on 10-11 June and reviewed 110 postdoctoral applications and 46 new host applications. The current host roster totals 86 of which 35 are NOAA labs.

Members of the 1993 steering committee included:

John Young (Univ. of Wisconsin, Madison) Chair  
Otis Brown (Univ. of Miami)  
Steve Esbensen (Oregon State Univ.)  
Ed Sarachik (Univ. of Washington)  
Richard Gammon (Univ. of Washington)

John Young stepped down as chair and rotated off committee. Steve Esbensen will chair the committee in 1994. Two new members will be appointed to replace Ed Sarachik and John Young.

The 1993 appointees are as follows:

### **Class 3**

#### **Edward Brook**

*Research Topic:* Paleo Ice Core  
*PhD Institution:* MIT/WHOI  
*Host:* URI, Bender

#### **Steve Frolking**

*Research Topic:* Terrestrial Bio Geochem  
*PhD Institution:* Colorado State University  
*Host:* Univ. of New Hampshire, Harriss

#### **Stephen Griffies**

*Research Topic:* Data Assimilation  
*PhD Institution:* Univ. of Pennsylvania  
*Host:* GFDL, K. Bryan

#### **Shi Jiang**

*Research Topic:* Ocean Data Assimilation  
*PhD Institution:* UCLA  
*Host:* MIT, P. Rizzoli

**Brian Mapes**

*Research Topic:* TOGA COARE MCS  
*PhD Institution:* University of Washington  
*Host:* University of Colorado, P. Webster

**Cynthia Nevison**

*Research Topic:* Strato O3 chem  
*PhD Institution:* Stanford University  
*Host:* NOAA, S. Solomon

**Reiner Schnur**

*Research Topic:* GEWEX Downscaling  
*PhD Institution:* Universität Hamburg  
*Host:* University of Washington, Lettenmaier

**Martin Visbeck**

*Research Topic:* Ocean Convection  
*PhD Institution:* Universität Kiel  
*Host:* MIT, Marshall

## **1994**

The Committee met at the University of Washington in Seattle on 12-13 May to review 85 applications and 71 new host applications. There were 18 female applicants.

Members of the 1994 steering committee included:

S.K. Esbensen (Oregon State Univ.), Chair  
Otis Brown (Univ. of Miami)  
Richard Gammon (Univ. of Washington)  
Ed Sarachik (Univ. of Washington)

The 1994 appointees are as follows:

### **Class 4**

#### **Myles Allen**

*Research Topic:* Uncertainties in Climate Prediction  
*PhD Institution:* Oxford University  
*Host:* MIT, R. Lindzen

#### **Richard Dissly**

*Research Topic:* Atmospheric Chemistry  
*PhD Institution:* CalTech  
*Host:* NOAA/ ERL/CMDL, P. Tans

#### **Colin Jones**

*Research Topic:* Deep Convection  
*PhD Institution:* University of East Anglia, UK  
*Host:* Colorado State University, D. Randall

#### **Sonya Legg**

*Research Topic:* Modeling of Deep Convection  
*PhD Institution:* Imperial College, UK  
*Host:* NCAR/UCLA, J. McWilliams

#### **Michael Moore**

*Research Topic:* Paleo  
*PhD Institution:* University of California, Berkeley  
*Host:* Scripps, C. Charles

**Ye Qi**

*Research Topic:* CO2

*PhD Institution:* SUNY, Syracuse

*Host:* Scripps, C. Keeling and Cornell University, D. Weinstein

**Alan Townsend**

*Research Topic:* CO2

*PhD Institution:* Stanford University

*Host:* NCAR, D. Schimel, E. Holland

Cornell University, B. Howarth

Harvard University, F. Bazzaz

**Yuxia Zhang**

*Research Topic:* Modeling - Atmospheric Sea Surface Interaction

*PhD Institution:* Texas A&M

*Host:* Naval Postgraduate School, A. Semtner

**First Summer Institute**

The first NOAA Summer Institute was held in Steamboat Springs, CO, from 13 to 17 June. The scientific leader for the workshop was John Young. The Institute had 40 participants. The goals of the Institute were to:

1. Develop a sense of community among climate and global change postdoctorates and senior researchers.
2. Explore the breadth of climate and global change research problem areas.
3. Discuss the future directions of climate science research.
4. Discuss the bridge between climate and global change scientific goals and public policy.

## **1995**

The Steering Committee met at the Scripps Institution of Oceanography in La Jolla, CA, on 4 & 5 May to review 78 applications and 65 new host applications.

Members of the 1995 Steering Committee included:

Richard Gammon (Univ. of Washington), Chair  
Judith Curry (Univ. of Colorado)  
Stefan Hastenroth (Univ. of Wisconsin-Madison)  
Richard Somerville (Scripps Institution of Oceanography)  
Max Suarez (NASA/Goddard Space Flight Center)

The 1995 appointees are as follows:

### **Class 5**

#### **Gidon Eshel**

*Research Topic:* Adjoint Chemistry  
*PhD Institution:* LDEO / Columbia University  
*Host:* Harvard University, B. Farrell

#### **Marilyn Hughes**

*Research Topic:* Snow Cover Variability  
*PhD Institution:* Rutgers University  
*Host:* Columbia University, G. Kukla

#### **Christopher Landsea**

*Research Topic:* Climate Diagnostic  
*PhD Institution:* Colorado State University  
*Host:* NOAA / AOML, Hurricane Res. Division, L. Shapiro

#### **Marc Lynch-Stieglitz**

*Research Topic:* Hydrology  
*PhD Institution:* Columbia University  
*Host:* Marine Biological Laboratory, J. Hobbie

#### **Scot Martin**

*Research Topic:* Chemistry  
*PhD Institution:* Cal-Tech  
*Host:* MIT, M. Molina

**William Merryfield**

*Research Topic:* Ocean Modeling  
*PhD Institution:* University of Colorado  
*Host:* University of Washington, G. Holloway

**Raymond Richardson**

*Research Topic:* TOGA--Air-Sea  
*PhD Institution:* University of Michigan  
*Host:* University of Rhode Island, L. Rothstein

**Jeffrey Severinghaus**

*Topic:* Ice Cores  
*PhD Institution:* Columbia University  
*Host:* University of Rhode Island, M. Bender

## **1996**

The Steering Committee met on May 1 in Boulder to review 67 postdoctoral applications. There were 52 host applications.

Members of the 1996 Steering Committee included:

Richard Gammon (Univ. of Washington), Chair  
Judith Curry (Univ. of Colorado)  
Stefan Hastenroath (Univ. of Wisconsin-Madison)  
Richard Somerville (Scripps Institution of Oceanography)  
Max Suarez (NASA/Goddard Space Flight Center)

The Second Summer Institute was held during the week of 17-21 June 1996 in Steamboat Springs, CO. A strong sense of community has developed through the Summer Institutes. Fellows arrive from diverse institutions and disciplines, and leave feeling more a part of a climate science network, which will function for years. All the participants developed a greater appreciation of the bridges between their personal research, the evolving global change science, and the role of public policy that will influence their careers.

The 1996 appointees are as follows:

### **Class 6**

#### **Glenn Berntson**

*Research Topic:* Eco System CO2  
*PhD Institution:* Harvard University  
*Host:* University of New Hampshire, J. D. Aber

#### **Aiguo Dai**

*Research Topic:* gc attributes  
*PhD Institution:* Columbia University  
*Host:* NCAR, K. Trenberth

#### **Maria Flatau**

*Research Topic:* Intraseasonal  
*PhD Institution:* Colorado State University  
*Host:* Scripps Institution of Oceanography, D. Rogers

#### **Loretta Mickley**

*Research Topic:* Chemistry Tropo.  
*PhD Institution:* University of Chicago  
*Host:* Harvard University, D. Jacob

**James Phillips**

*Research Topic:* H<sub>2</sub>O clusters

*PhD Institution:* University of Minnesota

*Host:* University of Colorado, V. Vaida

**Gavin Schmidt**

*Research Topic:* thermo-haline

*PhD Institution:* University College London

*Host:* Goddard Institute for Space Studies, D. Rind

**Bruno Tremblay**

*Research Topic:* ice granules

*PhD Institution:* McGill University

*Host:* Lamont-Doherty Earth Observatory, D. Martinson

**Dirk Verschuren**

*Research Topic:* lake paleo

*PhD Institution:* University of Minnesota

*Host:* Univ. of Minnesota, Large Lakes Observatory, H.E. Wright

## **1997**

The Steering Committee met on May 5 and 6 in Boulder to review 88 postdoctoral applications. There were 43 host applications.

Members of the 1997 Steering Committee included:

David Battisti (Univ. of Washington)  
Judith Curry (Univ. of Colorado)  
William Curry (WHOI)  
Stefan Hastenroth (Univ. of Wisconsin-Madison)  
Richard Somerville (Scripps Institution of Oceanography), Chairman

The 1997 appointees are as follows:

### **Class 7**

#### **Jess Adkins**

*Research Topic:* Paleo

*PhD Institution:* MIT

*Host:* University of Minnesota, L. Edward

#### **Heather Allen**

*Research Topic:* Chemistry

*PhD Institution:* University of California, Irvine

*Host:* University of Oregon, G. Richmond

#### **Susan Harder**

*Research Topic:* Bio-geo-chem

*PhD Institution:* University of Washington

*Host:* Washington State University, E. Brook

#### **Konrad Hughen**

*Research Topic:* Paleo

*PhD Institution:* University of Colorado

*Host:* Harvard University, D. Schrag

#### **Elise Pendall**

*Research Topic:* Paleo

*PhD Institution:* University of Arizona

*Host:* NOAA/ERL, P. Tans

**Peter Sauer**

*Research Topic: Paleo*

*PhD Institution: University of Colorado*

*Host: WHOI, J. Hayes*

**Christopher Small**

*Research Topic: Population*

*PhD Institution: University of California, San Diego*

*Host: Rockefeller University, J. Cohen*

**Adam Sobel**

*Research Topic: GOALS*

*PhD Institution: MIT*

*Host: University of Washington, C. Bretherton*

## **1998**

In 1998 there were 56 postdoctoral applications and 48 host applications.

Members of the 1998 Steering Committee included:

David Battisti (Univ. of Washington)  
Judith Curry (Univ. of Colorado)  
William Curry (WHOI)  
Inez Fung, University of Victoria  
Roger Pulwarty, CIRES/CDC  
Richard Somerville (Scripps Institution of Oceanography), Chairman

Mike Hall and Claudia Nierenberg met with the committee to discuss how the human dimensions area can best fit within the context of this program.

R. Somerville and J. Curry rotated off the committee. David Battisti will be the next chairman. Two new members will be appointed.

The third Summer Institute was held in Steamboat Springs June 15 through 19. Richard Gammon was the scientific leader of the Institute. The four-day event was again successful in developing a sense of community between senior and junior researchers in the field. The presentations were diverse and covered state-of-the-art, cutting-edge research results, which resulted in lively and interesting discussion and debate.

Below are the names of the 1998 appointees. James Randerson declined the fellowship so Ke Chen was appointed from the alternate list. Three of eight appointees were female.

### **Class 8**

#### **Bruce Anderson**

*Research Topic:* regional hydrology

*PhD Institution:* Scripps Institution of Oceanography

*Host:* MIT, D. Entekhabi

#### **Claudia Benitez-Nelson**

*Research Topic:* bio/geo/chem.

*PhD Institution:* WHOI/MIT

*Host:* University of Hawaii, D. Karl

**Ralph Foster**

*Research Topic:* planetary boundary layer  
*PhD Institution:* University of Washington  
*Host:* PMEL, M. McPhaden and Hayes Center, B. Smull

**Franz Geiger**

*Research Topic:* chemistry  
*PhD Institution:* Georgetown University  
*Host:* MIT, M. Molino

**Nicholas Gruber**

*Research Topic:* carbon  
*PhD Institution:* University of Bern  
*Host:* Princeton University, J. Sarmiento

**JoAnn Lysne**

*Research Topic:* physical oceanography  
*PhD Institution:* Texas A&M University  
*Host:* NCAR, C. Deser

**Ke Chen**

*Research Topic:* impacts - river basin management  
*PhD Institution:* Western Michigan University  
*Host:* CIESIN, LDEO, R. Chen

**Jane Teranes**

*Research Topic:* paleo-precipitation  
*PhD Institution:* Swiss Federal Institute of Technology  
*Host:* University of Michigan, T.C. Moore, Jr.

## **1999**

In 1999 we received 51 postdoctoral applications and 38 host applications.

Members of the 1999 Steering Committee included:

David Battisti, Chairman, University of Washington  
Bill Curry, Woods Hole Oceanographic Institution  
Inez Fung, University of California, Berkeley  
Maryam Golnaraghi, Climate Risk Solutions, MA  
Ralph Keeling, Scripps Institution of Oceanography

The Steering Committee met April 15 on the UC, Berkeley campus. Twelve applications were chosen for the short list and ranked. We made eight new appointments, two of which were from the alternate list.

The 1999 appointees are as follows:

### **Class 9**

#### **Cecilia Bitz**

*Research Topic:* Sea-ice modeling  
*PhD Institution:* University of Washington  
*Host:* Polar Ice Center, R. Moritz

#### **Heidi Cullen**

*Research Topic:* Impacts  
*PhD Institution:* Columbia University  
*Host:* IRI, Scripps, Nick Graham

#### **Mary Elliot**

*Research Topic:* Paleo  
*PhD Institution:* Universite Paris  
*Host:* Lamont-Doherty Earth Observatory, G. Bond, P. deMenocal, J. Stieglitz

#### **Michael Evans**

*Research Topic:* Corals  
*PhD Institution:* Columbia University  
*Host:* Harvard University, Dan Schrag

#### **Christopher Guay**

*Research Topic:* Carbon Cycle  
*PhD Institution:* Oregon State University  
*Host:* Lawrence Berkeley Lab, J. Bishop

**Oliver Pauluis**

*Research Topic:* General Circulation  
*PhD Institution:* Princeton University  
*Host:* MIT, K. Emanuel

**Helen Perks**

*Research Topic:* paleo corals  
*PhD Institution:* Scripps Institution of Oceanography  
*Host:* University of Minnesota, L. Edward

**Julia Verville**

*Research Topic:* paleo  
*PhD Institution:* Stanford University  
*Host:* University of Utah, J. Ehleringer

## **2000**

In 2000 we received 80 postdoctoral applications and 73 host applications.

Members of the 2000 Steering Committee included:

Ralph Keeling, Chairman, Scripps Institution of Oceanography  
Bob Chen, CIESEN, Columbia University  
Inez Fung, University of California, Berkeley  
Maryam Golnaraghi, Climate Risk Solutions, MA  
Dennis Hartmann, University of Washington

The Steering Committee met March 13 and 14 at Scripps Institution of Oceanography. Fifteen applications were chosen for the short list and ranked. We made eight new appointments, one from the alternate list.

The 2000 appointees are as follows:

### **Class 10**

#### **Tami Bond**

*Research Topic:* Aerosols  
*PhD Institution:* University of Washington  
*Host:* NOAA/PMEL, Patricia Quinn

#### **John Chiang**

*Research Topic:* Tropical Ocean Atmospheric Dynamics  
*PhD Institution:* Columbia University  
*Host:* University of Washington, David Battisti

#### **Roberta Hotinski**

*Research Topic:* Paleo Ocean Modeling  
*PhD Institution:* Pennsylvania State University  
*Host:* GFDL, Robbie Toggweiler

#### **Zackary Johnson**

*Research Topic:* Ocean Chemistry  
*PhD Institution:* Duke University  
*Host:* MIT, Sallie Chisholm

#### **Eric Maloney**

*Research Topic:* Climate Dynamics  
*PhD Institution:* University of Washington  
*Host:* NCAR/CGD, Jeffrey Kiehl

**Elisabeth Moyer**

*Research Topic:* Chemistry

*PhD Institution:* California Institute of Technology

*Host:* Harvard, James Anderson

**Anthony Prenni**

*Research Topic:* Atmospheric Chemistry

*PhD Institution:* University of Colorado

*Host:* Colorado State University, Paul De Mott and Sonia Kredenweis

**Iris Stewart**

*Research Topic:* Hydrology

*PhD Institution:* Stanford University

*Host:* Scripps Institution of Oceanography, Dan Cayan

During the week of June 11 through 15, the 4<sup>th</sup> Summer Institute was held in Steamboat Springs, CO. There were 42 attendees and David Battisti led a very successful workshop.

In December, at the annual AGU meeting held in San Francisco, the UCAR Visiting Scientist Programs organized a special afternoon session of talks from a select group of past postdoctoral fellows from the program. A reception followed the session, and there were over 100 attendees. The session speakers included Scot Martin, Sonja Legg, Gidon Eshel, Myles Allen, and Niki Gruber. Dan Schrag and David Battisti provided introductory remarks about the fellowship program.

## **2001**

In 2001 we received 59 postdoctoral applications and 51 host applications.

Members of the 2001 Steering Committee included:

Joseph Berry, Carnegie Institution of Washington  
Ralph Keeling, Chairman, Scripps Institution of Oceanography  
Bob Chen, CIESEN, Columbia University  
Maryam Golnaraghi, Climate Risk Solutions, MA  
Dennis Hartmann, University of Washington  
Daniel Schrag, Harvard University

The Steering Committee met March 13 and 14 at Harvard University. Seven finalists and four alternates were chosen. Because of budget restraints, we made seven new appointments, one from the alternate list.

The 2001 appointees are as follows:

### **Class 11**

#### **Simone Alin**

*Research Topic:* carbon

*PhD Institution:* University of Arizona

*Host:* University of Minnesota Large Lakes Observatory,  
Tom Johnson & Jim McManus

#### **Hezi Gildor**

*Research Topic:* air / sea interaction

*PhD Institution:* Weizmann Institute of Science, Israel

*Host:* Lamont-Doherty Earth Observatory, Mark Cane

#### **James Girton**

*Research Topic:* physical oceanography

*PhD Institution:* University of Washington

*Host:* Woods Hole Oceanographic Institution, Jim Price & Sonya Legg

#### **Colin Polsky**

*Research Topic:* human dimensions

*PhD Institution:* The Pennsylvania State University

*Host:* Harvard University, William Clark

**Robert Rhew**

*Research Topic:* atmospheric chemistry  
*PhD Institution:* Scripps Institution of Oceanography  
*Host:* University of California, Irvine, Eric Saltzman

**Bryan Shuman**

*Research Topic:* paleo / lake sediments  
*PhD Institution:* Brown University  
*Host:* University of Oregon, Patrick Bartlein

**Joe von Fischer**

*Research Topic:* ecology / paleo  
*PhD Institution:* Cornell University  
*Host:* Princeton University, Michael Bender

## **2002**

In 2002 we received 45 postdoctoral applications and 54 host applications.

Members of the 2002 Steering Committee included:

Joseph Berry, Carnegie Institution of Washington  
Mary Anne Carroll, University of Michigan  
Bob Chen, CIESEN, Columbia University  
Clara Deser, NCAR CGD  
Dennis Hartmann, University of Washington  
Daniel Schrag, Harvard University

The Steering Committee met April 3 and 4 in Santa Fe, New Mexico. Seven finalists and four alternates were chosen. We made seven new appointments, one from the alternate list.

During 2002, J. Michael Hall stepped down from his position as Director of the NOAA Office of Global Programs. Kenneth Mooney is currently Acting Director. Jim Todd attended the meeting with Lisa Dilling. He will be assuming the responsibility, effective immediately, as the NOAA OGP Program Manager for the postdoctoral program.

The Fifth Summer Institute was held in Steamboat Springs June 16 through 20. Richard Somerville was the scientific leader of the Institute. The four-day event was again successful in developing a sense of community between senior and junior researchers in the field. The presentations were diverse and covered state-of-the-art, cutting-edge research results, which resulted in lively and interesting discussion and debate.

The 2002 appointees are as follows:

### **Class 12**

#### **Becky Alexander**

*Research Topic:* paleo/chemistry/modeling  
*PhD Institution:* University of California, San Diego  
*Host:* Harvard University, Daniel Jacob

#### **Athanasios Koutavas**

*Research Topic:* ocean cores/cold tongue/ENSO  
*PhD Institution:* Columbia University (Lamont-Doherty Earth Observatory)  
*Host:* Massachusetts Institute of Technology, Julian Sachs

**Zhiming Kuang**

*Research Topic:* atmospheric water vapor  
*PhD Institution:* California Institute of Technology  
*Host:* University of Washington, Christopher Bretherton

**Markus Pahlow**

*Research Topic:* lidar techniques/boundary layer  
*PhD Institution:* Johns Hopkins University  
*Host:* NOAA Environment Technology Laboratory, Graham Feingold

**Gian-Kasper Plattner**

*Topic:* carbon cycle modeling/coastal  
*PhD Institution:* University of Bern  
*Host:* University of California, Los Angeles, Nicolas Gruber

**Stephanie Shaw**

*Research Topic:* methyl halide budgets  
*PhD Institution:* Massachusetts Institute of Technology  
*Host:* University of California, Berkeley, Allen Goldstein

**Jeffrey Yin**

*Research Topic:* climate dynamics  
*PhD Institution:* University of Washington  
*Host:* NOAA Climate Diagnostics Center, Prahsant Sardeshmukh

## **2003**

In 2003 we received 63 postdoctoral applications and 66 host applications.

Members of the 2003 Steering Committee included:

Joseph Berry, Carnegie Institution of Washington  
Mary Anne Carroll, University of Michigan  
Clara Deser, NCAR CGD  
Kerry Emanuel, MIT  
Roger Pulwarty, NOAA/CDC  
Daniel Schrag, Harvard University (Chair)

The Steering Committee met March 14 and 15 in Santa Fe, New Mexico. Seven finalists and four alternates were chosen. We had a 100% acceptance rate for the positions; therefore, no alternates were given fellowships.

Jim Todd, NOAA OGP Program Manager, also attended.

Clara Deser was appointed Chair for 2004. For the first time in the history of this program, there was passionate discussion on changing the way applications will be reviewed in the future. However, no definite changes were agreed upon. A few of the committee members felt that the applications each member had to review are too numerous to give a thorough read and thus fair evaluation. It was suggested that the applications be divided by research area so that each member of the committee reviews only a portion of the total number of applications. It was suggested that there be a conference call to begin the review process, and it was also suggested that applications be reviewed by at least two members of the committee. Panel members may like the applications on CD's instead of paper copies.

Also discussed was a celebration of the 100th postdoctoral fellow that would follow or precede the 6th Annual Summer Institute. This combined event will be held in the Washington, DC, area in spring 2004.

The 2003 appointees are as follows:

### **Class 13**

#### **Shari Fox-Gearheard**

*Research Topic:* human dimensions

*PhD Institution:* University of Colorado

*Host:* Harvard University, James McCarthy and  
Clark University, Colin Polsky

**Baylor Fox-Kemper**

*Research Topic:* physical oceanography  
*PhD Institution:* Massachusetts Institute of Technology  
*Host:* Princeton University, Geoffrey Vallis

**Julia Klein**

*Research Topic:* ecology  
*PhD Institution:* University of California, Berkeley  
*Host:* Colorado State University, Dennis Ojima

**Anna Michalak**

*Research Topic:* bio-geo-chem/atmospheric chem.  
*PhD Institution:* Stanford University  
*Host:* NOAA Climate Monitoring & Diagnostics Laboratory, Pieter Tans

**Jeffrey Shaman**

*Research Topic:* climate/public health  
*PhD Institution:* Columbia University  
*Host:* Harvard University, Andrew Spielman

**Heather Throop**

*Research Topic:* ecology  
*PhD Institution:* State University of New York at Stony Brook  
*Host:* University of Arizona, Steven Archer

**Eric Wilcox**

*Research Topic:* atmos. dynamics & physics  
*PhD Institution:* Scripps Institution of Oceanography  
*Host:* NOAA Geophysical Fluid Dynamics Laboratory, Leo Donner

## 2004

In 2004 we received 58 fellowship applications and 54 host applications.

Members of the 2004 Steering Committee included:

Clara Deser, NCAR, CGD (Co-Chair)  
Mary Anne Carroll, University of Michigan (Co-Chair)  
Kerry Emanuel, MIT  
Roger Pulwarty, NOAA CDC  
Susan Trumbore, UC Irvine  
Peter deMenocal, LDEO

Jim Todd, Program Sponsor NOAA OGP  
Ken Mooney, Program Sponsor NOAA OGP

We met in Boulder at the Hotel Boulderado on 17-18 March 2004. A revised application review process was implemented this year whereby the committee chairperson assigns applications as primary or secondary for the purpose of leading detailed discussions on each applicant. The applications are assigned based on committee member expertise.

Seven finalists and four alternates were chosen. One appointment was awarded to our first alternate.

We held the 6<sup>th</sup> Summer Institute July 19-22 2004 in Steamboat Springs. Dan Schrag and David Battisti were the Institute co-leaders.

The 2004 appointees are as follows:

### Class 14

#### Peter Huybers

*Research Topic:* paleo-oceanographic circulation  
*PhD Institution:* Massachusetts Institute of Technology  
*Host:* Wood Hole Oceanographic Institute, Bill Curry

#### Alicia Karspeck

*Research Topic:* ENSO adjoint  
*PhD Institution:* Lamont Doherty Earth Observatory, Columbia University  
*Host:* University of Washington, David Battisti

**John Lin**

*Research Topic:* biomass burning, Amazon

*PhD Institution:* Harvard University

*Host:* Colorado State University, Roger Pielke Sr.

**David Lorenz**

*Research Topic:* annular modes

*PhD Institution:* University of Washington

*Host:* University of Wisconsin, Eric DeWeaver

**Irina Marinov**

*Research Topic:* biogeochem of Southern Ocean

*PhD Institution:* Princeton University

*Host:* Massachusetts Institute of Technology, Michael Follows

**Dylan Millet**

*Research Topic:* atmospheric (aerosols) composition

*PhD Institution:* University of California, Berkeley

*Host:* Harvard University, Daniel Jacob

**Martin Wilkening**

*Research Topic:* land use, Alaska

*PhD Institution:* University of Alaska

*Hosts:* Lamont Doherty Earth Observatory, Roseanne D. Arrigo & United States Geological Survey, Jennifer Harden

## 2005

In 2005 there were 77 fellowship applications and 81 host applications.

Members of the 2005 Steering Committee included:

Kerry Emanuel, MIT (Chair)  
Amy Clement, RSMAS Univ of Miami  
Peter deMenocal, LDEO  
Nicholas Gruber, UCLA  
Adam Sobel, Columbia Univ.  
Susan Trumbore, UC Irvine

The meeting took place in Miami, FL.

This year marks the first time that alumni from this program have served on the steering committee (Niki Gruber and Adam Sobel).

A two-day symposium to honor and celebrate the 100<sup>th</sup> fellowship appointment will be held April 20 and 21 in Washington DC. A Capitol Hill reception is planned for April 20.

We increased the number of appointments to nine.

The 2005 appointees are as follows:

### **Class 15**

#### **Steven Allison**

*Research Topic:* carbon cycle

*PhD Institution:* Stanford University, Biological Sciences

*Host:* University of California, Irvine, K. Treseder

#### **Kristina Dahl**

*Research Topic:* hydrocycle – corals

*PhD Institution:* MIT/Woods Hole Oceanographic Institute, Oceanography

*Host:* Scripps Institution of Oceanography, Chris Charles

#### **Dargan Frierson**

*Research Topic:* Hadley circulation

*PhD Institution:* Princeton University, Applied Mathematics

*Host:* University of Chicago, R.T. Pierrehumbert

**Colette Heald**

*Research Topic:* aerosols

*PhD Institution:* Harvard University, Atmospheric Chemistry

*Host:* University of California, Berkeley, Inez Fung

**Lorraine Lisecki**

*Research Topic:* paleoclimate

*PhD Institution:* Brown University, Geological Sciences

*Host:* Boston University, Maureen Raymo

**Sharon Stammerjohn**

*Research Topic:* ocean warming – regional climate

*PhD Institution:* Columbia University, LDEO, Physical Oceanography & Climate

*Host:* NASA, Goddard Institute for Space Studies, David Rind

**Jun Wang**

*Research Topic:* aerosols (radiative effects)

*PhD Institution:* University of Alabama, Huntsville, Atmospheric Science

*Host:* Harvard University, Scot Martin

**Matthew Schmidt**

*Research Topic:* paleo hydrology

*PhD Institution:* University of California, Davis, Geology

*Host:* Georgia Institute of Technology, Jean Lynch-Stieglitz

**Robert Bailis**

*Research Topic:* Human Dimensions

*PhD Institution:* University of California, Berkeley, Energy & Resources

*Hosts:* Yale's School of Forestry and Environmental Sciences,  
Michael Dove and Lisa Curran

## 2006

In 2006 there were 118 fellowship applications and 118 host applications.

Members of the 2006 Steering Committee included:

Amy Clement, RSMAS Univ of Miami  
Peter deMenocal, LDEO (co-chair)  
Maria Carmen Lemos  
Adam Sobel, Columbia Univ.  
Susan Trumbore, UC Irvine (co-chair)  
Ray Pierrehumbert, Univ. of Chicago  
Nicholas Gruber, UCLA

The meeting took place in New York City, and Peter arranged for us to have our meeting in a beautiful room at the Museum of Natural History.

We increased the number of appointments to ten. Annually funding totals \$1.7 million and includes partial funding each year for the biennial Summer Institute.

The 2006 appointees are as follows:

### **Class 16**

#### **Julie Deshayes**

*Research Topic:* Physical oceanography

*PhD Institution:* LOCEAN, France, Physical Oceanography

*Hosts:* Woods Hole Oceanographic Institution, Irvine, F. Straneo and M. Spall

#### **Sarah Feakins**

*Research Topic:* Paleo

*PhD Institution:*, Columbia University (LDEO), Geology

*Host:* California Institute of Technology, Alex Sessions

#### **Angela Knapp**

*Research Topic:* Biogeochem

*PhD Institution:*, Princeton University, Geosciences

*Host:* University of Southern California, Douglas Capone and Lowell Stott

#### **Nir Krakauer**

*Research Topic:* Biogeochem

*PhD Institution:* California Institute of Technology, Biogeochemistry

*Host:* University of Southern California, Berkeley, Inez Fung

**David Lund**

*Research Topic:* Paleo

*PhD Institution:* Massachusetts Institute of Technology/Woods Hole  
Oceanographic Institution, Marine Geology

*Host:* California Institute of Technology, Jess Adkins

**Yuko Okumura**

*Research Topic:* Ocean-atmosphere interaction

*PhD Institution:* University of Hawaii, Meteorology

*Host:* National Center for Atmospheric Research, Clara Deser

**Timothy Shanahan**

*Research Topic:* Paleo

*PhD Institution:* University of Arizona, Geosciences

*Hosts:* Woods Hole Oceanographic Institution, Konrad Hughen

**Ken Takahashi**

*Research Topic:* Dynamics

*PhD Institution:* University of Washington, Atmospheric Sciences

*Host:* GFDL, Isaac Held

**Marijn van der Velde**

*Research Topic:* Hydrometeorology

*PhD Institution:* Universite catholique de Louvain, Belgium, Hydrology

*Hosts:* Columbia University, U. Lall and M. Cane

**Colin West**

*Research Topic:* Human Dimensions

*PhD Institution:* PhD, University of Arizona, Anthropology

*Host:* University of Alaska, Matt Berman

## 2007

In 2007, we received 78 fellowship applications. Ten new appointments were made with an annual budget of \$1.7 million.

Members of the 2007 Steering Committee included:

Amy Clement (CO-Chair), RSMAS University of Miami  
Adam Sobel, Columbia University  
Beth Holland, NCAR  
Daniel Jacob, Harvard  
Maria Carmen Lemos, University of Michigan  
Jerry McManus, Woods Hole Oceanographic Institution  
Ray Pierrehumbert, University of Chicago

The 2007 appointees are as follows:

### **Class 17**

#### **Larissa Back**

*Research Topic:* Deep convection

*PhD Institution:* University of Washington, Atmospheric Sciences

*Host:* Massachusetts Institute of Technology, Kerry Emanuel

#### **Timothy Bertram**

*Research Topic:* Aerosols – cloud interaction

*PhD Institution:* University of California, Chemistry

*Hosts:* University of Washington, Tom Ackerman and Joel Thornton

#### **Gang Chen**

*Research Topic:* Climate dynamics – jet streams

*PhD Institution:* Princeton University, Atmospheric & Oceanic Sciences

*Host:* Massachusetts Institute of Technology, Alan Plumb

#### **Benjamin Cook**

*Research Topic:* Dust

*PhD Institution:* University of Virginia, Environmental Science

*Hosts:* Lamont-Doherty Earth Observatory, Richard Seager and  
Goddard Institute for Space Studies, Ron Miller

**Delphine Farmer**

*Research Topic:* Atmospheric chemistry—aerosols  
*PhD Institution:* University of California, Berkeley, Chemistry  
*Host:* University of Colorado at Boulder  
*Appointment:* 2007-2009

**Nicole Lovenduski**

*Research Topic:* CO2 biogeochem  
*PhD Institution:* UCLA, Atmospheric & Oceanic Science  
*Host:* Colorado State University, Takamitsu Ito

**Martin Medina-Elizalde**

*Research Topic:* Paleoclimate (stalaginites)  
*PhD Institution:* University of California, Santa Barbara, Marine Science  
*Host:* University of Massachusetts, Stephen Burns

**Hyodae Seo**

*Research Topic:* Ocean/atmosphere interactions  
*PhD Institution:* Scripps Institution of Oceanography, Climate  
*Host:* University of Hawaii

**Rachel Stanley-Brown**

*Research Topic:* Carbon cycle  
*PhD Institution:* Massachusetts Institute of Technology, Woods Hole  
Oceanographic Institution, Chemical Oceanography  
*Host:* Princeton University, Michael Bender

**Tana Wood**

*Research Topic:* Soil biogeochem  
*PhD Institution:* University of Virginia, Environmental Sciences  
*Host:* University of California, Berkeley, Whendee Silver

## 2008

In 2008, we had 89 fellowship applications. Ten new appointments were made with an annual budget of \$1.7 million.

The 2008 Summer Institute was led by program alumni, Gavin Schmidt.

Members of the 2008 Steering Committee included:

Cecilia Bitz, University of Washington  
Wei-Jun Cai, University of Georgia  
Beth Holland, NCAR  
Daniel Jacob, Harvard  
Jerry McManus, LDEO, Columbia  
Ray Pierrehumbert, University of Chicago

The 2008 appointees are as follows:

### **Class 18**

#### **Louisa Bradtmiller**

*Research Topic:* Marine Paleo Empirical  
*PhD Institution:* Columbia University, Geochemistry  
*Host:* Woods Hole Oceanographic Institution, Laura Robinson

#### **Mariah Carbone**

*Research Topic:* Terrestrial ecosystems/CO<sub>2</sub>  
*PhD Institution:* University of California, Irvine, Earth System Science  
*Host:* University of California, Santa Barbara, Chris Still

#### **William D'Andrea**

*Research Topic:* Paleo FW Empirical  
*PhD Institution:* Brown University, Geological Sciences  
*Host:* University of Massachusetts, Ray Bradley

#### **Ian Eisenman**

*Research Topic:* Ice/Sea Ice  
*PhD Institution:* Harvard University, Earth & Planetary Sciences  
*Host:* University of Washington, David Battisti

#### **Miriam Freedman**

*Research Topic:* Atmospheric composition  
*PhD Institution:* University of Chicago, Physical Chemistry  
*Host:* University of Colorado, Margaret Tolbert

**Yi Huang**

*Research Topic:* Spectral OLR and Climate Change  
*PhD Institution:* Princeton University, Atmospheric & Oceanic Sciences  
*Host:* Harvard University, James Anderson

**Vasili Petrenko**

*Research Topic:* Ice Core Chemistry  
*PhD Institution:* Scripps Institution of Oceanography, Geosciences  
*Host:* University of Colorado, INSTAAR, James White

**Yohai Kaspi**

*Research Topic:* Atmospheric Jets - Storm Track  
*PhD Institution:* Massachusetts Institute of Technology, Physical Oceanography  
*Host:* California Institute of Technology, Tapio Schneider

**Ryan Sriver**

*Research Topic:* Tropical Cyclones  
*PhD Institution:* Purdue University, Earth & Atmospheric Sciences  
*Host:* Pennsylvania State University, Michael Mann

**Samuel Stechmann**

*Research Topic:* Clouds and Convection  
*PhD Institution:* New York University, Applied Mathematics  
*Host:* UCLA, B. Stevens & D. Neelin

**Rebecca Terry**

*Research Topic:* Paleo Ecology  
*PhD Institution:* University of Chicago, Paleobiology  
*Host:* Stanford University, Elizabeth Hadly

## 2009

In 2009, we had 86 fellowship applications. Ten new appointments were made with an annual budget of \$2.2 million.

Members of the 2009 Steering Committee included:

Roni Avissar, University of Miami, RSMAS  
Cecilia Bitz, University of Washington  
Wei-Jun Cai, University of Georgia  
Lisa Goddard, International Research Institution (IRI)  
Daniel Jacob, Harvard  
Patricia Matrai, Bigelow Laboratory for Ocean Science  
Jerry McManus, LDEO, Columbia University  
Tapio Schneider, California Institute of Technology

The 2009 appointees are as follows:

### Class 19

#### **Katye Altieri**

*Research Topic:* Organic Aerosols

*PhD Institution:* Rutgers University, Oceanography

*Host:* Princeton University, Daniel Sigman and  
Brown University, Meredith Hastings

#### **Brent Goehring**

*Research Topic:* Glaciers

*PhD Institution:* Columbia University, Geological Sciences

*Host:* Penn State University, Richard Alley

#### **Nadav Kashtan**

*Research Topic:* Microbial Oceanography

*PhD Institution:* Weizmann Institute of Science

*Host:* Massachusetts Institute of Technology, Sallie Chisholm &  
Mick Follows

#### **Brice Loose**

*Research Topic:* Ice-gas exchange

*PhD Institution:* Columbia, Earth & Environmental Sciences

*Host:* Woods Hole Oceanographic Institution, William Jenkins

**David McGee**

*Research Topic:* Paleohydrology

*PhD Institution:* Columbia University, Earth Sciences

*Host:* University of Minnesota, Larry Edwards

**Rebecca Neumann**

*Research Topic:* Soil Carbon

*PhD Institution:* Massachusetts Institute of Technology, Hydrology

*Host:* Harvard University, Michele Holbrook

**Kerri Pratt**

*Research Topic:* Atmospheric Chemistry

*PhD Institution:* University of California, San Diego, Chemistry and Biochemistry

*Host:* Purdue University, Paul Shepson

**Casey Saenger**

*Research Topic:* Paleocorals

*PhD Institution:* Woods Hole Oceanographic Institution,  
Marine Geology & Geophysics

*Host:* Yale University, Zhengrong Wang

**Russ Tolloch**

*Research Topic:* Physical Oceanography

*PhD Institution:* New York University, Atmosphere-Ocean Science  
and Mathematics

*Host:* Massachusetts Institute of Technology, John Marshall

**Lei Zhou**

*Research Topic:* Atmospheric Dynamics

*PhD Institution:* University of Maryland, Atmospheric & Oceanic Sciences

*Host:* Columbia University, Adam Sobel

## 2010

In 2010, we had 117 fellowships applications. Ten new appointments were made with an annual budget of \$2.7 million.

The 2010 Summer Institute was led by program alumni, Heidi Cullen and Martin Visbeck

Members of the 2010 Steering Committee included:

Roni Avissar, RSMAS, Univ. of Miami  
Cecilia Bitz, University of Washington  
Wei-Jun Cai, University of Georgia  
Lisa Goddard, International Research Institute (IRI)  
Daniel Jacob, Harvard  
Patricia Matrai, Bigelow Laboratory for Ocean Science  
Jerry McManus, LDEO, Columbia University  
Tapio Schneider, Cal Tech

The 2010 appointees are as follows:

### Class 20

#### Anthony Amend

*Research Topic:* Terrestrial biology  
*PhD Institution:* University of Hawaii at Manoa, Botany  
*Host:* University of California, Irvine, Jennifer Martiny

#### Michael Griffiths

*Research Topic:* Paleo monsoon/atmosphere  
*PhD Institution:* University of Newcastle, Australia, Paleoclimatology  
*Host:* University of California, Irvine, Kathleen Johnson

#### Naomi Marcil Levine

*Research Topic:* Terrestrial biogeochemistry  
*PhD Institution:* Woods Hole Oceanographic Institution  
*Host:* Harvard University, Paul Moorcroft

#### Ning Lin

*Research Topic:* Hurricane surge risk  
*PhD Institution:* Princeton University, Civil & Environmental Engineering  
*Host:* Massachusetts Institute of Technology, Kerry Emanuel

**Haojia (Abby) Ren**

*Research Topic:* Paleo oceanic nutrient

*PhD Institution:* Princeton University, Ocean & Environmental Science

*Host:* Lamont Doherty Earth Observatory, Columbia University, Robert Anderson

**Julie Richey**

*Research Topic:* Paleo precipitation

*PhD Institution:* University of South Florida, Marine Science

*Host:* University of Washington, Julian Sachs

**Brian Rose**

*Research Topic:* Atmospheric dynamics/arctic

*PhD Institution:* Massachusetts Institute of Technology,  
Atmospheres/Oceans/Climate

*Host:* University of Washington, David Battisti

**Jeremy Shakun**

*Research Topic:* Paleo climate/ice sheet

*PhD Institution:* Oregon State University, Geology

*Host:* Boston University, Maureen Raymo

**Jessica Tierney**

*Research Topic:* Paleo tropical climate

*PhD Institution:* Brown University, Geology

*Host:* Lamont Doherty Earth Observatory, Columbia University, Peter deMenocal

**Glenn Wolfe**

*Research Topic:* Atmospheric chemistry

*PhD Institution:* University of Washington, Chemistry

*Host:* University of Wisconsin-Madison, Frank Keutsch

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## 2011

In 2011, we had 109 fellowship applications. Ten new appointments were made with an annual budget of \$2.367 million.

Celebration marking the 20<sup>th</sup> anniversary of the program was held in Washington DC on 14-15 April 2011 at the NOAA Science Center. Senator Mark Udall's office sponsored a Hill reception for the event.

Members of the 2011 Steering Committee included:

Jess Adkins, Cal Tech  
Roni Avissar, RSMAS, Univ of Miami  
Mick Follows, MIT  
Sarah Gille, Scripps Institution of Oceanography  
Lisa Goddard, IRI  
Konrad Hughen, WHOI  
Richard Seager, LDEO  
Tapio Schneider, Cal Tech

The 2011 appointees are as follows:

### Class 21

#### Emma Aronson

*Research Topic:* Microbiology

*PhD Institution:* University of Pennsylvania, Biology, Ecology & Evolution

*Host:* University of California, Irvine, Prof. Steven Allison

#### Kate Dennis

*Research Topic:* Paleo

*PhD Institution:* Harvard University, Earth and Planetary Sciences

*Host:* Princeton University, Prof. Michael Bender

#### Aaron Donohoe

*Research Topic:* Climate dynamics

*PhD Institution:* University of Washington, Atmospheric Sciences

*Host:* Massachusetts Institute of Technology, Prof. John C. Marshall

#### Emily Fischer

*Research Topic:* Aerosols

*PhD Institution:* University of Washington, Atmospheric Sciences

*Host:* Harvard University, Dr. Daniel Jacob

**Gretchen Keppel-Aleks**

*Research Topic:* Carbon cycle

*PhD Institution:* Caltech, Environmental Science and Engineering

*Host:* University of California, Irvine, Dr. James T. Randerson

**Victoria Lee**

*Research Topic:* Paleo

*PhD Institution:* University of California, Berkeley, Earth & Planetary Science

*Host:* Lamont-Doherty Earth Observatory, Dr. Jerry McManus

**Katherine Mackey**

*Research Topic:* Bio-chem

*PhD Institution:* Stanford University, Civil and Environmental Engineering

*Host:* Woods Hole Oceanographic Institution, Dr. Mak Saito

**Michael Pritchard**

*Research Topic:* Climate dynamics

*PhD Institution:* University of California, San Deigo, Earth Sciences

*Host:* University of Washington, Dr. Christopher Bretherton

**James Rae**

*Research Topic:* Paleo

*PhD Institution:* University of Bristol, Earth Sciences

*Host:* California Institute of Technology, Geological & Planetary Sciences Dept.

**Jennifer Talbot**

*Research Topic:* Biology

*PhD Institution:* Univ. of California, Irvine, Ecology and Evolutionary Biology

*Host:* University of Minnesota, Kabir Peay (The Peay Lab moved to Stanford in the second year of the fellowship)

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## 2012

In 2012, there were fellowship applications. Ten new appointments (Class 21) were made. The annual budget for 2012 was \$2.319 million.

The 10<sup>th</sup> Summer Institute for the NOAA Climate and Global Change Postdoctoral Fellowship Program was held in Steamboat Springs, July 8-12, 2012. The scientific leaders for the Institute were David Battisti, University of Washington, and Daniel Schrag, Harvard University. They are long-time supporters of the NOAA C&GC Program. There were 36 attendees (22 current postdoctoral fellows of the C&GC and PACE Programs, 7 alumni of the program, 7 senior scientists, sponsor and organizers).

The Annual Past and Present Fellow Networking Luncheon was held on December 4, 2012, at the American Geophysical Union Meeting, San Francisco, California. Sixty-five (65) past and present fellows attended.

The 2012 Steering Committee Meeting was held at Caltech in Pasadena, California, on March 19 & 20.

Members of the 2012 Steering Committee included:

Jess Adkins, Caltech  
Michael (Mick) Follows, Massachusetts Institute of Technology  
Lisa Goddard, International Research Institute (IRI)  
Konrad Hughen, Woods Hole Oceanographic Institute  
Elisabeth Moyer, University of Chicago  
Richard Seager, Lamont-Doherty Earth Observatory

The 2012 appointees are as follows:

### Class 22

#### Elizabeth Barnes-Keys

*Research Topic:* Strat-tropwave break

*PhD Institution:* University of Washington, Biology, Atmospheric Science

*Host:* Lamont-Doherty Earth Observatory, Prof. Lorenzo Polvani

#### Eleanor Browne

*Research Topic:* Aerosols

*PhD Institution:* University of California, Berkeley, Dept. of Chemistry

*Host:* Massachusetts Institute of Technology, Prof. Jesse Kroll

#### Christo Buizert

*Research Topic:* Global methane & fern modeling

*PhD Institution:* University of Copenhagen, Center for Ice and Climate  
*Host:* Oregon State University, Prof. Edward Brook

**Abhishek Chatterjee**

*Research Topic:* Carbon data assimilation

*PhD Institution:* University of Michigan, Civil & Environmental Engineering  
*Host:* NCAR iMAGE, Dr. Jeffrey Anderson

**Hilary Close**

*Research Topic:* Ocean biogeochem

*PhD Institution:* Harvard University, Earth and Planetary Sciences  
*Host:* University of Hawai'i at Manoa, Irvine, Dr. Brian Popp

**Tra Dinh**

*Research Topic:* Stratosphere cirrus

*PhD Institution:* University of Washington, Atmospheric Science  
*Host:* Princeton University, Drs. Isaac Held & Stephan Fueglistaler

**Kuan Huang**

*Research Topic:* Arctic CO<sub>2</sub>

*PhD Institution:* Princeton University, Chemical Oceanography  
*Host:* Duke University, Dr. Nicholas Cassar

**Ben Lee**

*Research Topic:* Secondary organic aerosols

*PhD Institution:* Harvard University, Engineering & Applied Sciences  
*Host:* University of Washington, Dr. Joel Thornton

**Emmanuel Vincent**

*Research Topic:* Tropical cyclones

*PhD Institution:* Universite Pierre et marie Currie  
*Host:* Massachusetts Institute of Technology, Prof. Kerry Emanuel

**Katherine Wejnert**

*Research Topic:* Paleo proxy-ENSO

*PhD Institution:* University of South Carolina, Marine Sciences  
*Host:* Georgia Institute of Technology, Dr. Jean Lynch-Stieglitz

## 2013

In 2013, there were 125 fellowship applications. Eight new appointments (Class 23) were made. The number of appointments was reduced from 10 to 8 because of overall Federal budget cuts. The annual budget for 2013 is estimated at \$2.1 million.

The 2013 Steering Committee Meeting was held in New York History at the American Museum of Natural History, on March 27 & 28.

Members of the 2013 Steering Committee included:

Jess Adkins, Caltech  
Michael (Mick) Follows, Massachusetts Institute of Technology  
Sarah Gille, Scripps Institution of Oceanography  
Konrad Huguen, Woods Hole Oceanographic Institute  
Benjamin Kirtman, RSMAS, University of Miami  
Elisabeth Moyer, University of Chicago  
Richard Seager, Lamont-Doherty Earth Observatory

The 2013 appointees are as follows:

### Class 23

#### Katherine Allen

*Research Topic:* Paleo

*PhD Institution:* Columbia University, Paleooceanography

*Host:* Rutgers University, Prof. Elisabeth Sikes

#### William Anderegg

*Research Topic:* Ecology

*PhD Institution:* Stanford University, Ecology, Evolution & Population Biology

*Host:* Princeton University, Prof. Stephen Pacala

#### Nathan Arnold

*Research Topic:* Madden-Julian Oscillation

*PhD Institution:* Harvard University, Earth & Planetary Sciences

*Host:* Colorado State University, Prof. David Randall

#### Richard Daniel Griffin

*Research Topic:* Paleo

*PhD Institution:* University of Arizona, Geography

*Host:* Woods Hole Oceanographic Institution, Dr. Kevin Anchukaitis

**Malte Jansen**

*Research Topic:* Dynamics

*PhD Institution:* Massachusetts Institute of Technology, Climate  
Physics and Chemistry

*Host:* Geophysics Fluid Dynamics Laboratory, Dr. Isaac Held

**Seeta Sistla**

*Research Topic:* Ecology/Soils Reforestation

*PhD Institution:* University of California, Santa Barbara, Ecology, Evolution &  
Marine Biology

*Host:* University of California, Irvine, Dr. Steven Allison

**Darcy Taniguchi**

*Research Topic:* Marine Biology

*PhD Institution:* Scripps Institution of Oceanography, Oceanography

*Host:* Massachusetts Institute of Technology, Dr. Mick Follows

**Lukas Valin**

*Research Topic:* Atmospheric Chemistry

*PhD Institution:* University of California, Berkeley, Atmospheric Chemistry

*Host:* Lamont-Doherty Earth Observatory, Dr. Arlene Fiore

2014 estimated at \$2.121 (\$100K SI, \$2 million 10 postdocs)

## 2014

In 2014, there were 148 fellowship applications. Eight new appointments (Class 24) were made. The annual budget for 2014 is estimated at \$1.99 million.

The 11<sup>th</sup> Summer Institute for the NOAA Climate and Global Change Postdoctoral Fellowship Program was held in Steamboat Springs, July 13-18, 2014. The scientific leader for the Institute was Asst. Prof. Michael (Mick) Fellows, Massachusetts Institute of Technology. There were 35 attendees (19 current postdoctoral fellows of the C&GC and PACE Programs, 7 alumni of the program, 9 senior scientists, sponsors and organizers).

The Annual Past and Present Fellow Networking Luncheon was held on December 16, 2014, at the American Geophysical Union Meeting, San Francisco, California. Sixty-four (64) past and present fellows attended.

The 2014 Steering Committee Meeting was held in Pasadena, CA at the California Institute of Technology on March 10-11, 2014.

Members of the 2014 Steering Committee included:

Jess Adkins, Caltech  
Sarah Gille, Scripps Institution of Oceanography  
Konrad Hughen, Woods Hole Oceanographic Institute  
Benjamin Kirtman, RSMAS, University of Miami  
David McGee, Massachusetts Institute of Technology  
Elisabeth Moyer, University of Chicago

The 2014 appointees are as follows:

### **Class 24**

#### **Timothy Cronin**

*Research Topic:* Atmospheric Dynamics

*PhD Institution:* Massachusetts Institute of Technology, Climate  
Physics and Chemistry

*Host:* Harvard University, Dr. Eli Tziperman

#### **Graham Dow**

*Research Topic:* Ecology/Acidification

*PhD Institution:* Stanford University, Cell and Molecular Biology

*Host:* Harvard University, Dr. Andrew Richardson

#### **Alison Gray**

*Research Topic:* Ocean Biogeochemistry

*PhD Institution:* University of Washington, Physical Oceanography  
*Host :* Princeton University, Dr. Jorge Sarmiento

**Feng He**

*Research Topic:* Paleo

*PhD Institution:* University of Wisconsin-Madison, Atmospheric and Oceanic  
Sciences

*Host:* Oregon State University, Dr. Peter Clark

**Sandra Holden**

*Research Topic:* Ecology

*PhD Institution:* University of California, Irvine, Ecology and Evolutionary  
Biology

*Host:* University of California, Irvine, Dr. Michael Goulden and Claudia Czimczik

**Salvatore Pascale**

*Research Topic:* Monsoons/Climate Dynamics

*PhD Institution:* University of Reading, Meteorology

*Host:* California Institute of Technology, Dr. Simona Bordoni

**Scott Steinschneider**

*Research Topic:* Precipitation/Hydroclimate extremes

*PhD Institution:* University of Massachusetts, Amherst, Civil Engineering

*Host:* International Research Institute, Dr. Upmanu Lall

**Daniel Stolper**

*Research Topic:* Oxygen Cycle

*PhD Institution:* California Institute of Technology, Geobiology

*Host:* Princeton University, Dr. Francois Morel and Prof. Michael Bender

**2015**

In 2015, there were 132 fellowship applications. Eight new appointments (Class 25) were made. The annual budget for 2015 is estimated at \$1.75 million.

The Annual Past and Present Fellow Networking Luncheon was held on December 14, 2015, at the American Geophysical Union Meeting, San Francisco, California. Fifty (50) past and present fellows attended.

The 2015 Steering Committee Meeting was held in Miami Florida at the University of Miami/RSMAS, on March 19-20, 2015.

Members of the 2015 Steering Committee included:

David Battisti, University of Washington  
Benjamin Kirtman, RSMAS, University of Miami  
David McGee, Massachusetts Institute of Technology  
Dylan Millet, University of Minnesota  
Elisabeth Moyer, University of Chicago  
Joellen Russell, University of Arizona

The 2015 appointees are as follows:

### **Class 25**

#### **Alyssa Atwood**

*Research Topic:* Paleoclimate

*PhD Institution:* University of Washington, Oceanography

*Host:* University of California, Berkeley, Dr. John Chiang and Georgia Institute of Technology, Prof. Kim Cobb

#### **Colin Averill**

*Research Topic:* Ecology/Fungus

*PhD Institution:* University of Texas at Austin, Ecology, Evolution & Behavior Program

*Host:* Boston University, Dr. Jennifer Talbot

#### **Navid Constantinou**

*Research Topic:* Ocean Dynamics

*PhD Institution:* National and Kapodistrian University of Athens, Physics

*Host:* Scripps Institution of Oceanography, Dr. William Young

#### **Sebastian Eastham**

*Research Topic:* Atmospheric dynamics/Model development

*PhD Institution:* Massachusetts Institute of Technology, Aeronautics and Astronautics

*Host:* Harvard University, Dr. Daniel Jacob

**Xue Feng**

*Research Topic:* Ecosystems/Drought

*PhD Institution:* Duke University, Civil and Environmental Engineering

*Host:* University of California, Berkeley, Dr. Sally Thompson

**Laura Fierce**

*Research Topic:* Atmospheric Chemistry

*PhD Institution:* University of Illinois at Urbana-Champaign, Environmental  
Engineering

*Host:* Brookhaven Laboratory, Dr. Robert McGraw

**Alexander Robel**

*Research Topic:* Glaciology

*PhD Institution:* Harvard University, Earth and Ocean Sciences

*Host:* University of Chicago, Dr. Douglas MacAyeal

**Nathan Steiger**

*Research Topic:* Atmospheric Chemistry

*PhD Institution:* University of Washington, Atmospheric Sciences

*Host:* Lamont-Doherty Earth Observatory, Dr. Jason Smerdon

**2016**

In 2016, there were 125 fellowship applications. Eight new appointments (Class 26) were made. The annual budget for 2016 is estimated at \$2.078 million.

The 12<sup>th</sup> Summer Institute for the NOAA Climate and Global Change Postdoctoral Fellowship Program was held in Steamboat Springs, July 24-29, 2016. The scientific leader for the Institute was Prof. Tami Bond, University of Illinois at Urbana-Champaign. There were 32 attendees (15 current postdoctoral fellows of the C&GC and PACE Programs, 8 alumni of the program, 9 senior scientists, sponsors and organizers).

The Annual Past and Present Fellow Networking Luncheon was held on December 13, 2016, at the American Geophysical Union Meeting, San Francisco, California. Sixty (60) past and present fellows attended.

The 2016 Steering Committee Meeting was held in New York, NY at the Excelsior Hotel, on March 3-4, 2016.

Members of the 2016 Steering Committee included:

David Battisti, University of Washington  
Benjamin Kirtman, RSMAS, University of Miami  
David McGee, Massachusetts Institute of Technology  
Dylan Millet, University of Minnesota  
Joellen Russell, University of Arizona  
Jennifer Talbot, Boston University

The 2016 appointees are as follows:

### **Class 26**

#### **Rebecca Jackson**

*Research Topic:* Ocean Dynamics, Glaciers

*PhD Institution:* Massachusetts Institute of Technology, Physical Oceanography

*Host:* Oregon State University, Dr. Jonathan Nash

#### **Sarah Larson**

*Research Topic:* Ecology

*PhD Institution:* University of Miami, Meteorology and Physical Oceanography

*Host:* University of Wisconsin, Dr. Daniel Vimont

#### **Emily Newsom**

*Research Topic:* Ocean Dynamics

*PhD Institution:* University of Washington, Earth & Space Sciences

*Host:* NCAR/CGD, Dr. Frank Bryan and California Institute of Technology, Dr. Andrew Thompson

**Adam Pellegrini**

*Research Topic:* Fire Ecology

*PhD Institution:* Princeton University, Ecology and Evolutionary Biology

*Host:* Stanford University, Dr. Robert Jackson

**Scott Powell**

*Research Topic:* Climate Dynamics, Clouds and MJO

*PhD Institution:* University of Washington, Atmospheric Science

*Host:* Colorado State University, Dr. Eric Maloney

**Malte Stuecker**

*Research Topic:* Climate Dynamics, Ice Sheet

*PhD Institution:* University of Hawaii, Manoa, Meteorology

*Host:* University of Washington, Dr. Cecilia Bitz

**Gregory Wagner**

*Research Topic:* Ocean Dynamics, GFD

*PhD Institution:* University of California, San Diego, Mechanical and Aerospace  
Engineering

*Host:* Massachusetts Institute of Technology, Dr. Raffaele Ferrari

**Oliver Watt-Meyer**

*Research Topic:* Climate Dynamics, Clouds

*PhD Institution:* University of Toronto, Physics

*Host:* University of Washington, Dargan Frierson

## 2017

In 2017, there were 138 fellowship applications. Four new appointments (Class 27) were made. The annual budget for 2017 is estimated at \$2.249 million.

The 2017 Steering Committee Meeting was held in Boston, MA at the Massachusetts Institute for Technology, on March 9-10, 2017.

Members of the 2017 Steering Committee included:

David Battisti, University of Washington  
David McGee, Massachusetts Institute of Technology  
Dylan Millet, University of Minnesota  
Joellen Russell, University of Arizona  
Olga Sergienko, Princeton University  
Jennifer Talbot, Boston University

The 2017 appointees are as follows:

### Class 26

#### Leander Anderegg

*Research Topic:* Biology, plant response carbon cycle  
*PhD Institution:* University of Washington, Biology  
*Host:* University of California, Berkeley, Dr. Todd Dawson

#### Kelvin Bates

*Research Topic:* Atmospheric Chemistry, global oxidant budgets  
*PhD Institution:* California Institute of Technology, Chemistry  
*Host:* Harvard University, Dr. Daniel Jacob

#### Rei Chemke

*Research Topic:* Climate, Atmospheric dynamics, sea surface temperatures on tropical expansion  
*PhD Institution:* Weizmann Institute of Science, Atmospheric Dynamics  
*Host:* Columbia University, Dr. Lorenzo M. Polvani

#### Christopher Horvat

*Research Topic:* Ice, applied mathematics, ice flows and ocean flows  
*PhD Institution:* Harvard University, Applied Mathematics  
*Host:* Brown University, Dr. Baylor Fox-Kemper