



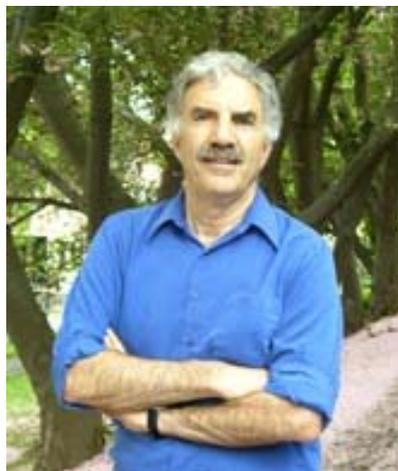
AOS & CICS Newsletter

Winter 2009

Volume 3, Number 1

Bender Receives 2008 Roger Revelle Medal

Michael Bender, Professor of Geosciences, has been awarded the 2008 Roger Revelle Medal for “seminal contributions to geochemistry and biogeochemistry, culminating in his work on O₂ and its isotopes that transformed the use of glacial ice cores in paleoclimate studies.” The medal was presented at the AGU annual meeting in San Francisco on December 17, 2008, with an introduction by AOS and CICS Director, Jorge Sarmiento.



Professor Michael Bender

Established in 1991, the Revelle Medal recognizes “outstanding accomplishments or contributions toward the understanding of the Earth’s atmospheric processes, including its dynamics, chemistry, and radiation; and toward the role of the atmosphere, atmosphere-ocean coupling, or atmosphere-land coupling in determining the climate, biogeochemical cycles, or other key elements of the climate system.”

According to Sarmiento, “Michael has tackled an amazingly broad range of problems in ocean geochemistry and biogeochemistry, in all of which he has shown a deep scholarship and profound originality.” He has made major contributions to our understanding of paleoclimate through the measurement and interpretation of oxygen isotope measurements in trapped air bubbles of glacial ice cores. Since publishing his initial paper on this topic in 1985, Bender’s contributions have included not only ice core measurements of oxygen isotopes, but an impressive array of other applications based on measurements of oxygen isotopes and mass spectrometric measurements of O₂/N₂ in firn air, in the atmosphere, and in the ocean.

Included among his other major accomplishments is the first robust and general methods for temporal correlation among ice cores and between ice cores and sediment records using the ¹⁸O/¹⁶O ratio and more recently the O₂/N₂ ratio; dating of ice cores by correlation of these properties with insolation changes; development of the theory of gas isotope fractionation in firn air which has since had many interesting applications; the use of oxygen isotopes to reconstruct aspects of biospheric productivity over glacial/interglacial cycles; and the use of oxygen isotopes as tools for the study of biological productivity in the ocean.

“Among those of us who know him well, he has earned the deepest respect for the strength of his intellect and for his unflinching commitment to scientific rigor and personal integrity,” Sarmiento said. “I am very happy to see the Roger Revelle Medal added to his well-deserved list of honors.” Bender has been recognized by his election to fellowship in the Geochemical Society and AGU, his receipt of the Patterson Medal of 1998, and election to the National Academy of Sciences in 2001.

Program in Atmospheric and Oceanic Sciences (AOS) & The Cooperative Institute for Climate Science (CICS)

Inside this issue:

- Bender Receives Medal..... 1*
- Ram Named GFDL Director2*
- Vallis & Held Organize PCTS Program.....2*
- Galbraith's Arctic Cruise2*
- Forecast Model Achieves High Accuracy3*
- Cape Town Visit3*
- Magi Earns Prestigious Distinction.....4*
- CICS Sponsors QUEST Summer Institute4*
- Ming Receives Presidential Award.....4*
- Transportation Update.....5*
- Research in Action.....5*
- Alumni News.....6*
- AOS & CICS News.....6*

Bender joins a prestigious array of former Revelle Medal recipients, including AOS Senior Scientist, Syukuro (Suki) Manabe, who was awarded the Medal in 1993. ■

Ram Named Director of GFDL

Contributed by Maria Setzer, GFDL
Communications Director

NOAA announced in November that V. "Ram" Ramaswamy has been named the Geophysical Fluid Dynamics Laboratory's new Director. Ram has been acting director of the laboratory since January 2007. He joined the GFDL research staff in 1987 and has served as a senior scientist, group leader of the Atmospheric Physics and Chemistry division, and manager of NOAA's Climate Research and Modeling Program.



Recently named GFDL Director, V. "Ram" Ramaswamy

In congratulating Ram, Richard W. Spinrad (NOAA assistant administrator for oceanic and atmospheric research) said "Throughout his career, Ram has advanced our knowledge of the climate system. Ram's leadership will guide the laboratory's direction as new and challenging questions arise."

During his tenure as a research scientist at GFDL, Ram has come to be considered one of the leaders in climate modeling in the world. In addition to responsibilities as Director, Ram is on the faculty at Princeton University, with rank of Professor. Ram's career has been devoted to improving our understanding of atmospheric radiation and incorporating this understanding in climate models. His published research includes over 130 papers on climate in refereed journals. Since 1992, he has been a Lead Author or Coordinating Lead Author for each of the assessment reports for the Intergovernmental Panel for Climate Change. He has also had a leading role in the Climate Change Science program, and is currently serving as the Vice-Chair of

the World Climate Research Program. Earlier this year, Ram was named a Fellow of the American Geophysical Union (AGU).

Ram holds Bachelor's and Master's degrees from the University of Delhi, India. He earned his Ph.D from State University of New York at Albany.

AOS congratulates Ram on joining the ranks of NOAA lab directors! ■

Vallis & Held to Organize Upcoming Program for PCTS

AOS Faculty Issac Held and Geoff Vallis are organizing "Atmosphere-Ocean Dynamics and Climate Change," a short program sponsored by the Princeton Center for Theoretical Science (PCTS). The program is a two-week workshop planned for May 4 – 14, 2009 focused on theoretical problems in atmospheric and oceanic dynamics that have potential importance to the problem of global warming. Topics will include geostrophic turbulence and the large-scale structure of the atmosphere, models of the Earth's cloud cover and water vapor distribution, tropical storm formation and intensity, El-Nino variability, the large-scale structure of the oceanic circulation, as well as small-scale mixing in the oceans. In each case, lectures will be devoted in part to the identification of idealized models which may be of interest to the larger theoretical science community, and in part to placing these theoretical ideas in the context of ongoing climate change research.

The Princeton Center for Theoretical Science is designed to enhance research and education in the theoretical natural sciences through prestigious postdoctoral fellowships and programs that identify and explore forefront issues in theoretical science. The Center is home to the highly select corps of Center Postdoctoral Fellows, chosen each year in an international search for the most talented individuals, and to the Center Faculty Fellows and Visiting Fellows. The Center also hosts the workshops, seminars, public

lectures and other activities associated with its yearly programs. ■

Gailbraith Cruises with Students on Ice

This August, Research Associate Eric Galbraith joined a group of 67 high school students for a two week cruise along the coast of Baffin Island, in the Canadian Arctic archipelago. As part of a 15-member education team for the non-profit organization Students on Ice, Galbraith gave lectures on oceanography and climate change. Other educators included Don Walsh, one of the two crewmembers during the deepest-ever dive to the bottom of the Marianas trench in the Trieste, and Anne Hanson, an Inuit elder and commissioner of Nunavut.



Eric Galbraith, AOS Research Associate

The expedition visited the small Inuit community of Qikirtarjuaq, landed at traditional camping sites, visited the world's largest bowhead whale calving ground, and cruised majestic fjords. Day hikes led to glaciers, hilltop vistas, and tundra meadows rich with berries. A total of 11 polar bears were spotted, and zodiac cruises took students into close proximity to swimming herds of walrus and seals snoozing on sea ice. Galbraith helped the international group of students collect live zooplankton for a shipboard aquarium, identify algae under the microscope, and measure seawater temperature and salinity. Signs of climate change were widespread, in the freshly exposed moraines left by rapidly retreating glaciers, and in the extreme concern of the local Inuit about the fast-paced alterations around them.



Polar bear chilling on an iceberg at sea

The last night of the cruise was particularly dramatic, with a sunset that painted a brilliant orange backdrop to drifting icebergs, followed by the Leonid meteor shower falling among a spectacular display of Northern lights.



Students in sea ice near Pangnirtung, eastern Baffin Island

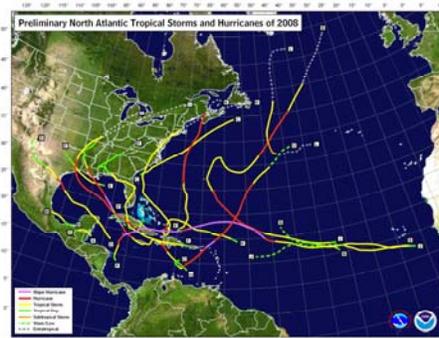
Students on Ice is an award-winning organization offering unique learning expeditions to the Antarctic and the Arctic. Their mandate is to provide students from around the world with inspiring educational opportunities at the ends of our Earth, and in doing so, help them foster a new understanding and respect for the planet. ■

GFDL's Hurricane Forecast Model Achieves High Accuracy in 2008 Season

Contributed by Maria Setzer, GFDL Communications Director

The 2008 hurricane season officially came to a close on November 30, marking the end of a season that produced a record number of consecutive storms to strike the United States and ranks as one of the more active seasons in the 64 years since comprehensive records began.

Since it became operational in 1995, the Geophysical Fluid Dynamics Laboratory's (GFDL) hurricane forecast model has consistently been among the leading models used by the National Hurricane Center (NHC) for accuracy in predicting hurricane track and intensity. GFDL's hurricane forecast model performed extremely well again in the 2008 hurricane season. In both the East Pacific and Atlantic basins, the GFDL model had the lowest track forecast errors when compared to the other standard numerical guidance. In the critical 48-hour and 72-hour time period, the model errors in the Atlantic basin were about 13 and 8 percent (respectively) better than the next best standard model guidance. Similarly, in the East Pacific, where the GFDL model had the lowest track errors at all time levels, the model errors at the critical 48-hour and 72-hour time period, were 21 and 12 percent less (respectively) than the next best performing model. The excellent guidance of the GFDL model was an important contributor to the outstanding performance by NHC in the very active 2008 Atlantic season.



A total of 16 named storms formed in the Atlantic this season, based on an operational estimate by the National Hurricane Center. The storms included eight hurricanes, five of which were major hurricanes at Category 3 strength or higher. An average season has 11 named storms, six hurricanes and two major hurricanes. Overall, the season is tied as the fourth most active in terms of named storms (16) and major hurricanes (five), and is tied as the fifth most active in terms of hurricanes (eight) since 1944, which was the first year aircraft missions flew into tropical storms and hurricanes. ■

Faculty Visits Cape Town to Strengthen Ties

In early July 2008, Geosciences Faculty Michael Bender, Satish Myneni, and Bess Ward along with graduate student, Sarah Fawcett, visited George Philander, Knox Taylor Professor of Geosciences, in South Africa. The purpose of their visit was twofold: to explore ways for increasing the number of Princeton undergraduates, particularly in the sciences, who spend a semester abroad at the University of Cape Town (UCT) and to develop long-term research projects jointly with South African scientists who are working to establish the African Centre for Climate and Earth System Science (ACCESS), where Philander is research director. The Center is supported jointly by several universities and government agencies in South Africa and engages in research and education related to climate and environmental issues, taking full advantage of the astonishing diversity of climatic zones in Southern Africa.

During their trip, the faculty met with several scientists from UCT and also from government agencies such as the Council for Scientific and Industrial Research (CSIR), with whom they are planning research projects involving the biochemistry of water on land, and of the three remarkably different oceans that surround southern Africa. In addition, Bender, Philander, and Fawcett, accompanied by Prof. Francis Wilson, a UCT economist with ties to the Woodrow Wilson School, visited the impoverished Eastern Cape and Fort Hare University, a historically black college, where they met with the vice-chancellor and several faculty members. According to Philander, "this region offers ample scope for junior and senior theses, and for interactions with black students from a background different from those at UCT."

While in South Africa, the group also participated in an "Advanced Seminar on Biogeochemistry," which was attended by some 35 South African scientists and students from across from across the country. Additionally, they met with UCT faculty involved with Princeton students, primarily from the Woodrow Wilson Program to explore the

development of future courses and field trips for Princeton students spending a semester abroad at UCT, to discuss ways to attract greater numbers of scientists and engineers from Princeton, and to explore the possibility of a reciprocal graduate program that would give South African students access to Princeton facilities.

In 2007 George Philander began dividing his time between Princeton University and the UCT and hopes that this trip, and trips like it, act as a catalyst for continued collaborative efforts between South African scientists and researchers here at Princeton. ■

CICS Scientist Earns Distinction from Scientific Journal

Contributed by Maria Setzer, GFDL Communications Director

In June, Brian Magi, a Postdoctoral Fellow in the Cooperative Institute for Climate Science, learned that he was selected by the journal *Annales Geophysicae* as their Best Reviewer for Lower Atmosphere and Climate, for 2007. Three other scientists shared the distinction, in different subject areas, for "maintaining the high quality" of the journal. The designation is given to an individual who has contributed a referee's report of outstanding merit on manuscripts submitted for publication in *Annales Geophysicae*.



Brian Magi, CICS Postdoctoral Fellow

Brian's own work focuses on evaluating the treatment of biomass burning emissions in GFDL's global climate model, and linking simulation input more closely to current available observational data. He was a reviewer for the IPCC Fourth Assessment Report and is a referee

for *Journal of Geophysical Research*, and three other peer-reviewed scientific publications, in addition to *Annales Geophysicae*.

The quality of scientific journals depends in a crucial way upon the peer review process, and the success of this process owes much to members of the scientific community who are conscientious reviewers, contributing significant time and effort, and who are committed to the ideals of accuracy and soundness of methodology. This distinction underscores the preeminent research conducted at Princeton and GFDL, and the high regard with which our scientists are held in the international science community. ■

CICS Sponsors QUEST Summer Institute

This summer fourteen New Jersey teachers of grades 4-12 participated in inquiry-based experiences, emphasizing self-directed investigation rather than textbook learning, at a CICS-sponsored summer institute in weather and climate.



Quest participants immersed in self-directed investigation

Bringing together local teachers together with Princeton scientists and students, the well-established Quest program aims to enhance participants' knowledge of science and inspire new ways to present the material to their students. The program is hosted by the University's Program in Teacher Preparation, in collaboration with CICS. Under the guidance of Andrew Bocarsly, Professor of Chemistry, and Dr. Steven Carson, formerly of GFDL and currently a middle school science teacher, participants explored fundamental content regarding

the Earth's climate, including the greenhouse effect, human impacts on climate and global warming, as well as consequences of climate change. Solar energy conservation, fuel cells, and wind energy were also explored during the one week workshop which took place between July 14th and the 18th. ■



Inquiry-based experiences are the foundation of the Summer Institute

Yi Ming Receives Presidential Award

Contributed by Maria Setzer, GFDL Communications Director

Yi Ming, research physical scientist at GFDL, was recently named a recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE). The Presidential Award is the highest honor bestowed by the U.S. government to recognize and support the extraordinary achievements of young professionals at the outset of their independent research careers in science and technology.



(L to R) Patrick Gallagher, Deputy Director of National Institute of Standards and Technology (NIST), PECASE recipient Yi Ming, & Jack Marburger III, Science Advisor to the President and Director of the Office of Science and Technology Policy

This award recognizes Dr. Ming for the depth and breadth of his accomplishments since earning his PhD in Civil and Environmental Engineering from

Princeton University in 2003, including seventeen publications in major journals. Dr. Ming's pioneering research is pushing the frontiers of science in aerosol climate forcing. He is helping to answer important questions about the climate and human health impacts associated with emissions of particulate air pollutants. The citation for his award noted his "outstanding scientific advancements leading to reliable quantification of the aerosol forcing of global climate change, and effectively communicating the results to Federal agencies, key scientific bodies, academia, and private sector."

Dr. Ming also has co-taught aerosol physics and climate impacts in the Atmospheric and Oceanic Sciences graduate program at Princeton University, serves on numerous scientific committees, and has presented invited talks at international meetings. In 2003, he completed a National Science Foundation Science Policy Fellowship while also earning a certificate from the Woodrow Wilson School of Public and International Affairs.

GFDL is fortunate to have such an exceptional scientist in their ranks, and this recognition of both Dr. Ming's accomplishments and his potential is well deserved. With this distinction, he joins GFDL oceanographer Gabriel Vecchi, and physical scientist Arlene Fiore, who received PECASE awards in 2004 and 2006, respectively.

The PECASE program was established in 1996 to honor scientists and engineers who show exceptional potential for leadership early in their careers. Eight federal departments and agencies annually nominate candidates whose work shows the greatest promise to benefit the agency's mission. Participating agencies award these scientists and engineers up to five years of funding to further their research in support of critical government missions. ■

Transportation Update

In the fall, stakeholders from Forrestal and Main Campus gathered together to discuss transportation issues. The outcome of that meeting was a daily

shuttle service to and from Main Campus which began on January 5, 2009 and runs hourly from 7:30am to 7:30pm. Stops include: PPPL, Forrestal AOS, Millstone Apartments, Dean Mathey Apartments, Fisher Hall, Frist/Guyot, South Campus, Lot 23 A, and the Dinky. The Dinky has connections to NJ Transit and the Princeton Borough FreeB shuttle. The South Campus stop allows transfers to either the Campus Circulator or the East Route. A map of transit stops and routes to and from Forrestal/PPPL has been distributed via email and can be found at the following link:

<http://www.princeton.edu/transportation/ti gertransit.html>,

along with additional information on other shuttle routes. ■

AOS & CICS Research in Action

[This column is intended to focus on AOS & CICS research accomplishments and milestones, past, present, and future. In this issue, we highlight the accomplishments of Jennifer Simeon, who was a professional technical staff member in Jorge Sarmiento's group for nearly six years.]

Having worked with Jorge Sarmiento and his group for nearly six years, Jennifer Simeon has recently begun her new position at the Laboratoire des Sciences du Climat et de l'Environnement at Gif-sur-Yvette, France.

In 2003, Jennifer moved to New Jersey to work with Jorge Sarmiento. While at Princeton, Jennifer was involved in various projects, the main projects being an analysis of Sub-Antarctic Mode Water within the MOM3 model using dye and nutrient tracers. The other being the development of a coarse resolution coupled climate model, based on GFDL's CM2.1 climate model. Jennifer attributes her positive experience at Princeton largely to the constructive mentorship of Jorge Sarmiento as well as Rick Slater, Anand Gnanadesikan, and Steve Griffies.

AOS Senior Earth System Modeler, Rick Slater applauded Jennifer's "ability to pick up new things and go with them, such as running some of our models, and

then be able to organize that information and pass it on to other new members of our group." Particularly noteworthy to Slater, was Jennifer's role in the



Jennifer Simeon and daughter, Clara

development of the coarse resolution ocean model and the follow-up coarse resolution coupled model. "While she was not the only person to work on this project, she definitely laid a firm groundwork for the model. This model is crucial to the work that our group does, and her impact will be felt for a long time," Slater said.

Finally, there is the fact that Jennifer was such a pleasant person to work with. She was always smiling and willing to help out with anything that the group had to do. When AOS Research Associate Eric Galbraith arrived at Sayre Hall, he hadn't even used UNIX before and could barely change directories on his own. "Jennifer patiently taught me everything I needed to know in order to run the models, analyze the output, and fix things when they broke. Her instructions were patient and thorough, and she had a great intuitive sense for what would work, and what wouldn't," Galbraith said.

Jennifer continues her research in oceanography at the LSCE in France, looking at interannual variability of the North Atlantic and the role of the ocean dynamics with respect to the air-sea interaction of carbon. She will be working with Marion Gehlen and Princeton alumnus, James Orr. ■

Alumni News

Dickey Awarded Prestigious Naval Oceanographic Science Chair

Tommy Dickey, an AOS alumnus and former advisee of George Mellor, was recently awarded a prestigious Secretary of the Navy and Chief of Naval Operations Chair in Oceanographic Sciences. The Office of Naval Research program recognizes pioneering academic leaders in oceanography with collaborations across scientific disciplines. The award provides support over four years for multidisciplinary research and encourages the development of future ocean researchers through graduate student support. Dickey and his research team will explore ocean responses to hurricanes, mesoscale eddies, and optical variability forced by ocean dynamics. The research chair, a lifetime appointment, is awarded to two distinguished oceanographers every four years. Recipients also serve as advisors to the Chief of Naval Research.

Dickey, a UC Santa Barbara oceanographer and professor in the Department of Geography, is one of two leading scientists nationwide to be awarded this honor. Dickey is principal investigator of UCSB's Ocean Physics Laboratory. His primary research interest is interdisciplinary oceanography, with an emphasis on upper dynamics and bio-optical variability. Dickey received his Ph.D. from Princeton in geophysical fluid dynamics in October of 1977 and has been a member of the UCSB faculty since 1996. ■

AOS & CICS News

Congratulations to **Kelly Kearney** for passing her General Exam! She has also received NOAA's Dr. Nancy Foster Scholarship which provides support for outstanding scholarship and encourages independent graduate-level research in oceanography, marine biology, or maritime archaeology, particularly by women and members of minority groups.

Working with Jorge Sarmiento in the Department of Geosciences, Kelly's research focuses on incorporating upper trophic level species (i.e. anything above the level of zooplankton) and top-down forcing factors into traditional ocean biogeochemical models that focus on nutrient cycling and primary production. With this model, Kelly hopes to investigate and assess the importance of the various factors affecting oceanic food webs, including both bottom-up climate forcing and top-down anthropogenic effects.

Arrivals:

Ni-Zhang Golaz, an Environmental Modeler and Analyst in PEI under Steve Pacala, began working with Sarmiento's group in August 2008 and is involved in carbon cycle research with a focus on the atmospheric CO₂ fluxes and concentrations. Research involves numerical modeling and statistical data analysis.

Jamie Palter has joined the Sarmiento group as a postdoctoral research associate in Geosciences as has been awarded a postdoctoral teaching fellowship through Princeton's Council on Science and Technology. She comes to Princeton after receiving her Ph.D. in Physical Oceanography from Duke University in 2007 and spending the last year as an NSF Postdoctoral Fellow at the Marine Sciences Institute in Barcelona, Spain.

Salil Mahajan joined us on October 1, 2008 to work with Geoff Vallis and Rong Zhang (GFDL) after graduating from Texas A&M with a Ph.D. in August. His research will involve the role of air-sea interactions in the remote influence of the Atlantic on tropical Pacific Climate.

Larry Horowitz, NOAA/GFDL, has been appointed as a lecturer in Geosciences and will be teaching Atmospheric Chemistry in the spring.

Junfeng Liu transferred from the WWS-STEP Program on 12/1/08. He is working with Larry Horowitz on the contribution of domestic and trans-pacific transport of short-lived air pollutants to the 21st century air quality and climate changes of the United States.

Maxim Nikurashi comes to Princeton from MIT-WHOI Joint program. He began working with Sonya Legg on 1/1/09 on studies of small-scale mixing driven by flow in canyons. He will apply these studies to develop parameterization of the mixing generated by steady flow over ocean bottom topography.

Departures:

After numerous years as a Lecturer with rank of Associate Professor in Geosciences, **Hiram (Chip) Levy II** has stepped down from his teaching responsibilities for AOS537-Atmospheric Chemistry, but remains a GFDL scientist and Princeton collaborator. We are grateful for his countless years of commitment and contributions to the AOS Program as both a lecturer and mentor to AOS graduate students and postdoctoral associates.

Jennifer Simeon – 8/9/08 Laboratoire des Sciences du Climat et de l'Environnement, UMR CEA-CNRS, CEA Saclay, F-91191 Gif-sur-Yvette, France

Pablo Zurita-Gotor returned again this summer as a Visiting Associate Research Scholar working with Geoff Vallis and Isaac Held on large-scale atmospheric dynamics from May 1 – August 31, 2008. He was on leave from the Universidad Complutense de Madrid, Facultad de Ciencias Fisicas.

Charles Stock – 7/5/08 to NOAA/GFDL

Whit Anderson – 8/30/08 to NOAA/GFDL

Maria Pastor joined the Sarmiento group for the fall semester as a Visiting Assistant Professional Specialist (Visiting graduate student) from the Marine Sciences Institute in Barcelona, Spain on August 25 and was at Princeton until December 19, 2008. During her stay, she investigated questions concerning the flow patterns of South Atlantic Central Waters in the eastern North Atlantic, between the equatorial circulation system and the Cape Verde front, as well as their pathways toward this area and their northern propagation along the African continental slope.

Sara Mikaloff Fletcher – 12/19/08
National Institute for Water and Air
Research (NIWA) Private Bag 14901,
Wellington 301 Evans Bay Parade,
Hataitai, Wellington 6021 New Zealand

Graduate Student Defenses and Departures

Yi Huang (8/08) Advisor: Ramaswamy
Satellite – *Observed and Model-Simulated
Outgoing Longwave Radiation Spectra* –
has accepted a postdoctoral position at
Harvard to begin October/November.

Patrick Schultz (10/08) Advisor:
Sarmiento - *Observing Phytoplankton
Physiology and Ocean Ecosystem
Structure from Space* – has accepted a
consultant position at McKinsey & Co.,
Germany.

Birth Announcements

June 30 to Sarah and **John Dunne**
(Previous AOS Postdoc and Current
GFDL collaborator)
Owen Aloysius Dunne was 4 lbs, 10 oz.
Ciara Kathryn Dunne was 5 lbs, 12 oz.

July 14 to Heather and **George Hurtt**
(Previous EEB Postdoc and Current CICS
collaborator) Madison Nancy Hurtt was
7lbs, 3oz.

July 19 to Jeanne and **Andy Jacobson**
(Previous AOS Postdoc and Current
ESRL collaborator) Annika Alys Bucci
Jacobson – 7lbs, 5oz.

December 21 to Yihui Zhou and **Zhibin
Sun** (Postdoctoral Research Associate)
George Sun was 6lbs, 5oz.

GFDLEA Summer Cookout Organized by AOS Graduate Students

A GFDLEA Summer Cookout organized
by AOS Graduate Students took place on
July 22nd. The GFDLEA would like to
thank **Andrew Ballinger** and fellow
AOS graduate students **Ian Lloyd, Peng
Xie, Ying Li, Yuanyuan Fang, Lauren
Padilla, and Erica Staehling** for
organizing the cookout and the numerous
others who pitched in to help out with
preparation, set-up, and clean-up. All
attending enjoyed delicious food and the

opportunity to make new friends and
spend time with old ones. A great time
was had by all!



AOS Graduate Students, Ying Li, Yuanyuan
Fang, and Andrew Ballinger

Photos of the event, courtesy of **Yi
Huang**, are available for viewing at:
<http://picasaweb.google.com/toetoe/20080722GFDLEAOSBBQ?authkey=e47RQWgQI28#>



AOS Graduate Students Erica Staehling, Ian
Lloyd, Ying Li, and MAE Graduate Student
Lauren Paddilla

Sayre Hall's Iron Chef Competitions

Congratulations to **Kelly Kearney**, the
winner of **Iron Chef X**. Her winning
entry was a mint tart with fresh summer
berries. Runners up were **Stephanie
Henson** for her victoria sponge cake filled
with whipped cream and decorated in four
colors (using raspberries, blueberries,
basil, and powdered sugar) to represent
the four regions that make up the United
Kingdom. Never one to shy away from
all things political, **Sara Mikaloff-
Fletcher** made a *Yes We Can* Cheesecake,
decorated with the Obama "O" symbol
using blueberries, raspberries, and white
chocolate cream cheese icing. The
"Thinking Globally, Cooking Locally"
competition was held in July.

Iron Chef XI: Trick or Eat, was held on
October 29th with the winningest chef in
Sayre Hall Iron Chef history, **Sara**

Mikaloff-Fletcher, once again claiming
the title for her four-layer pumpkin spice
cake with maple mousse and praline
pecan filling, white chocolate butter
cream icing topped off with marzipan
pumpkins. Daniele Bianchi came in a
close second for his delicious home made
pumpkin ravioli. Sadly, this was the last
chance to cross whisks with Sara who
recently took her culinary skills and treats
away to New Zealand.

The latest **Iron Chef** competition (**XII**)
was held in December with a festive
theme: *Let it snow: warm holiday flavors
to keep the winter at bay!*
Following in Sara's footsteps, **Kelly
Kearney** once again claimed the coveted
title with a chocolate tart with candied
cranberries. Coming in a yummy second,
was **Rick Slater** with a tangerine mousse
delight in milk chocolate and white
chocolate cups. The date and time of
Iron Chef XIII will be forthcoming.

AOS Program
Princeton University
Sayre Hall
300 Forrestal Road
Princeton, NJ 08544-0710

Phone:
(609) 258-6047

Fax:
(609) 258-2850

We're on the Web!
www.aos.princeton.edu

Editor: Joanne Curcio
Email:
jcurcio@princeton.edu