

Autumn 2005

# Atmospheric Circulation

Newsletter of the University of Washington Atmospheric Sciences Department

## Peter V. Hobbs (1936 - 2005)

by Professor John M. Wallace



Peter Hobbs with the Convair-131 in 1985

The department mourns the loss of Peter Hobbs, who died of pancreatic cancer July 25. Hobbs founded and directed the Cloud and Aerosol Research Group, which has provided the department with a strong capability for experimental and field-oriented research. A total of 29 Ph.D. students and 34 M.S. students carried out research under his supervision. Hobbs was a prolific writer, authoring or co-authoring 4 books and over 350 papers. His lectures were known for their clarity and rigor.

Hobbs experienced what he described as “a wild, adventurous youth on the streets of postwar London.” He engaged in competitive swimming and held the title Junior Boxing champion of the County of Surrey. He also developed a keen interest in science. At age 12 he attended a public lecture entitled “Clouds and Rainmaking” by the renowned cloud physicist, John Mason, a professor at Imperial College of Science and Technology, London University. After the lecture, Hobbs asked Mason how he might join his research group, to which Mason replied, “Come back and see me when you have a degree in Physics.” Fourteen years later (in 1960), Hobbs appeared at his door with degree in hand, and Mason took him on as a graduate student on the spot. While doing conscripted military service in the Royal Air Force, and then as a student

in London, Hobbs enjoyed a rich social and cultural life. It was there that he met his wife, Sylvia, who worked in the cloud physics laboratory with Mason’s group.

During his early years in the department, Hobbs focused on laboratory and theoretical studies that provided much of the material for his magnum opus, *Ice Physics*, published in 1974. His airborne studies began in

1969 with the acquisition of the Douglas B-23 aircraft that had been formerly owned by Howard Hughes. The B-23 was used primarily for studies of aerosols and winter storms over the state of Washington, and it enabled Hobbs and his colleagues to obtain spectacular close-up photos of the eruption of Mt. St. Helens. In 1984 the B-23 was replaced by a larger, longer range, more extensively instrumented Convair-131A that was used to sample Arctic haze, the Kuwait oil fires and agricultural burning over the Amazon basin. In 1997, the C-131A was replaced by a higher performance Convair 580, which remained in operation until it was sold in 2002. That Hobbs was to keep his research group intact for over 30 years with funding derived exclusively from research grants represents a major achievement in its own right. Among the scientific findings of Hobbs’ group were the discoveries that ice crystals in clouds may be much more numerous, raindrops much larger, and aerosols from fires much less reflective than previously believed. Their measurements from instrumented aircraft also provided valuable insights into the structure of rainbands in  
(cont. on page 4)

## Major Growth and a Bright Future for the Department’s Undergraduate Program

by Professor Cliff Mass

A great department has both breadth and depth, and ours enjoys not only a world-class graduate program, but an energetic and growing undergraduate program as well. The number of majors in the program has increased rapidly during the past few years from approximately 25 in the 1990s to 63 in 2005. In 2005 we graduated an all-time record of 19 students, and the junior and senior classes are so large that new furniture was needed in our sixth-floor classroom! An interesting aspect of the growth is that we are getting more out-of-state inquiries and students, such as current senior Eric Schoening from Austin, Texas, and recent graduate Sean Casey from Arizona.

But numbers only tell part of the story. To parallel the rise in numbers the department has enhanced many of its undergraduate facilities. For example, students wanted a place of their own for studying and meeting, and the department responded by creating a combined student work area and map room — a facility that is heavily used throughout the year. The undergraduate computer lab was (cont. on page 4)



Brett Carlson working on his undergraduate research in the Computer Lab

## Chair's Column



In July we lost a friend and colleague when Professor **Peter Hobbs** succumbed to pancreatic cancer. Peter served the department with distinction since 1963 and mentored many outstanding research scientists as well as contributing importantly to our teaching program. He is a giant in the field of atmospheric sciences as is described in an article by Mike Wallace in this issue of *Atmospheric Circulation*. Peter and Mike had nearly finished work on a new edition of their bestselling textbook when Peter died. Peter has bequeathed his share of the royalties on the new edition to promote excellence in this department. Thank you, Peter, for everything.

The past year has seen much change in the department, in addition to Peter's passing. Professor Tom Ackerman (Ph.D., '76) joined the faculty and will split his time between the department and the Pacific Northwest Lab in Richland, Washington. His specialty is radiation transfer and ground-based remote sensing of clouds and aerosols. Also joining the faculty are Assistant Professors Becky Alexander and Cecilia Bitz (Ph.D., '97). Becky is an atmospheric chemist specializing in stable isotopes of sulfur and Cecilia is a climate modeler specializing in sea ice and polar climate. Professors Marcia Baker and Bob Brown retired to the emeritus faculty during the past year. Assistant Professor David Catling accepted a Marie Curie Chair of Astrobiology at Bristol University in his native England. Research Associate Professor Sandra Yuter (Ph.D., '96) has left to join the teaching faculty at North Carolina State University. The department is currently conducting a search for a new faculty member, and when this is successfully completed we will have 18 members of the academic faculty, 8 research faculty, about 60 graduate students and about 65 undergraduate majors.

In the past year Emeritus Professor Joost Businger and Professor Steve Warren have both established endowed funds to support atmospheric sciences students. We are very

thankful for their commitment and support.

I am delighted that we have more messages from alumni in this issue of *Atmospheric Circulation*. It is always very interesting to read about events in the lives of our graduates. We would be delighted to hear from you. You can either write or send an email to alumni@atmos.washington.edu.

Best wishes for the coming year,  
Dennis Hartmann

## New Faculty Members

The department welcomes the addition of Assistant Professors **Becky Alexander** and **Cecilia Bitz** to our faculty.

Alexander comes to us from Harvard University, where she was a NOAA Climate and Global Change post-doctoral fellow. Her research interests include paleoclimatology, atmospheric chemistry, aerosols, and stable isotope geochemistry. Alexander received her Ph.D. (2002) in Atmospheric Chemistry from the University of California, San Diego.

Cecilia Bitz has been a physicist at the University of Washington's Applied Physics Laboratory since 2001. The past three years she was also an Affiliate Professor of the Department of Atmospheric Sciences and taught climate and climate change. She will continue her work in high-latitude climatology and climate dynamics, and the role of sea ice in climate change. Cecilia is a graduate alumna of this department (Ph.D., 1997).

## Departmental News

**Lyatt Jaeglé** received an American Geophysical Union Editors' Citation for Excellence.

**Tapio Schneider** of Caltech received the first annual James R. Holton Award for Junior Atmospheric Scientists of the AGU.

**Dale Durran** received votes for outstanding professor in the UW Alumni Association's online poll of UW seniors.

**Robert Wood** and **Joel Thornton**

won a UW College of Arts and Sciences Curriculum Development Award.

**Terry Kubar**, a graduate student in Atmospheric Sciences, won this year's departmental forecasting contest. Each Spring Quarter, students in the final quarter of the series of forecasting classes, as well as graduate students, members of faculty and staff, predict the SeaTac maximum temperature for the next day, and the percentage chance of precipitation.

In November 2004 **Cliff Mass** gave a public lecture, *Windstorms of the Pacific Northwest: The Origin and History of the Great Windstorms of the Region*.

**Norbert Untersteiner**, Emeritus Pro-



Cecilia Bitz and Becky Alexander

fessor and former chair of the department, was elected to fellow of American Association for the Advancement of Science.

**Peter Hobbs** and Research Meteorologist **Art Rangno** won a Prize for Excellence in Weather Modification Research, awarded by the United Nations' World Meteorological Organization and the United Arab Emirates. They were cited "for their conscientious application of physical principles to weather modification."

Graduate student **Glenn Wolfe**, who is working with Professor Joel Thornton, received a NASA Earth System Science Fellowship for his proposal to make in situ observations of nitrogen oxide radical reservoirs using chemical ionization mass spectrometry. (cont. on page 4)

## Atmospheric Sciences' Alumni in the Military

by Professor Cliff Mass

Typically 10-20% of the department's undergrads are in the Reserve Officers' Training Corps (ROTC), with most directed toward Air Force careers as either weather officers or navigator/pilots. Our students have served throughout the world from Iraq to the Persian Gulf and Japan to Europe.

One alumnus is **Matt Doggett** (B.S., 1992), who was in the University of Washington's Air Force ROTC. After leaving the UW he headed for Mountain Home Air Force Base for two years, before moving to the Air Force Institute of Technology to secure a master's degree. With that background, he was then transferred to the Air Force Combat Climatology Center, which is collocated with the well-known National Climatic Data Center in Asheville, North Carolina. Matt left the active military in 2001, gaining employment as a scientific programmer/analyst at Oregon State University, but joined the Oregon Air National Guard as a staff weather officer. With the initiation of hostilities in the Middle East, Matt was deployed in 2003 to McChord Air Force Base and then in 2005 to Iraq, where he provides weather support for the U.S. Army's 42nd Infantry Division. His fascinating blog, <http://oregonstate.edu/~doggettm/wordpress/chronicles> his experiences in Iraq during the past few months.

**Kelly Doser** (B.S., 1995) first was assigned in Bosnia at Tuzla Air Base. He then received his M.S. in Space Environmental Sciences at the Air Force Institute of Technology. Recently Kelly headed to the Headquarters of the Air Force Space Command in Colorado to work on space weather prediction.

**Michelle Welborn** (B.S., 1995) represents many of our military graduates who fly or navigate; she completed navigator training in Florida, and has been flying C-141's out of McChord for over five years. However they serve, the department is

proud of the contributions of our graduates throughout the world.

## Alumni News

**Kimm Viebrock** (B.S., 1989) was recently voted president of the Puget Sound Coaches' Association, a local chapter of the International Coach Federation. She has also upgraded an aging Novice amateur radio license to General class for use as an emergency communications volunteer with the Bellevue Fire Department. Kimm maintains a home weather station and lives with her family in Bellevue, Washington

**Robert L. Brydges** (B.S., 1974) served five years in the Air Force as a Weather Officer. He was stationed at Offutt Air Force Base's Global Weather Central in Omaha, Nebraska, and was the Chief Forecaster



*Matt Doggett on his way to Iraq*

for one of three forecasting teams. He produced base weather forecasts for the United States and Europe and high level icing and turbulence forecasts for the entire Northern Hemisphere. He also produced wide area forecasts for the tropics and the Southern Hemisphere.

He returned to the University of Washington in 1979 and graduated with a B.S. in Mechanical Engineering in 1981. He has worked for Boeing in Seattle since 1981, first as a spacecraft thermal analyst for ten years as part of the Boeing Aerospace Company,

and subsequently in Airplane Design Integration for Boeing Commercial Airplanes, currently developing new models of the 777. He plans to retire next year and move to Bend, Oregon where he plans to start his final career in golf course maintenance.

**Barbara Laufersweiler** (Kratz) (B.S., 1986) has two sons, ages 9 and 5, and is a Web designer and Web site owner. She hasn't left the atmospheric sciences entirely: she is married to Mark Laufersweiler, computing systems coordinator and adjunct faculty member, the University of Oklahoma School of Meteorology. After graduate school together in Pennsylvania State's Department of Meteorology, they have lived in Livermore, California; Tallahassee, Florida; and now Norman, Oklahoma, a mile or so from the National Weather Center.

**M. Gary Verholek** (B.S., 1969) recently retired as a Lieutenant Colonel from the Air Weather Service, United States Air Force Reserves. He is president and general manager of two synergistic consulting firms. He founded the Environmental Consulting Group, Inc. in 1993 to assist industry and government agencies with regulatory affairs (EPA & OSHA). In 1997, he founded Industrial Process Services, Inc. to assist with projects related to process and environmental engineering.

His experience includes four years in industry; ten years on active duty in the Air Force (plus fifteen years in the Reserves supporting environmental research and analysis) and three years at a national lab performing atmospheric research and analysis. Since 1974 he has been a consultant to industry and government in the following areas: technology, process engineering, environmental engineering and regulatory compliance for environment, and health and safety.

He and his wife, Donna, were married in their hometown of Farrell, Pennsylvania in 1965. They now reside near Knoxville, Tennessee. Their two children, Aaron and Heather, are both married and reside in the East Tennessee area.

**Chuck Robertson** (M.S., 1963) was a faculty member in the University of Washington Physics Department until he retired in June 2004. He and his wife, JoAnne, now live on Camano Island. He has been active in the American Association of Physics Teachers (cont. on page 4)

*Alumni News, cont. from page 3*

for his entire teaching career and now serves as its treasurer. He visited with Joost and Marianna Businger on Guemes Island earlier this year and had a delightful time.

**Perry Perrault** (B.S., 1983) was hired upon graduation by the Pacific Northwest National Laboratories (PNNL) in Richland, Washington. He has worked there as a meteorologist ever since. Currently he is a senior meteorologist at Hanford Meteorological Station (HMS), providing vital meteorological support for the Hanford site and all its contractors. He and his wife of 26 years, Tina, an elementary school teacher and University of Washington alumna, 1982, have two daughters: Stacy, 20, attends Arizona State University and Nicole, 18, will attend the University of Idaho this fall.

**Steve Markkanen** (B.S., 1973) joined the National Weather Service in 1978 and worked as a forecaster for 12 years in Denver. Since 1990 he has been with the San Francisco Bay Area forecast office, where he is a Senior Forecaster. He plans to retire in September, 2006.

**Joel Norris** (Ph.D., 1997) has just finished his fifth year as an Assistant Professor at the Scripps Institution of Oceanography. He and his wife, Brittany, have a delightful one-year-old daughter, Lydia, and are expecting a second child in February.

**Robert Reeves** (Ph.D., 1980) is co-Editor of a recent publication entitled *Reflections on 25 Years of Analysis, Diagnosis, and Prediction, 1979 – 2004*. The document summarizes the work at the National Oceanic and Atmospheric Administration's Climate Prediction Center on the occasion of the 25th anniversary of its formation. Dr. Reeves conducted personal interviews with many individuals who made important contributions to the development of climate prediction, including Professor John M. Wallace. Dr. Reeves plans to use material from the interviews and publication to produce a history of operational extended and long-range prediction.

**Jeff Renner's** (B.S., 1988) new book, *Mountain Weather: Backcountry Forecasting And Weather Safety For Hikers, Campers, Climbers, Skiers, and Snowboarders*, was published by Mountaineer Books in March, 2005.

**Greg Sinnet** (B.S., 1975) is the Chief Meteorologist for the Department of Natural Resources in Olympia, Washington. He has worked as a consultant, including three years for the ASARCO smelter, four years with DOT and the last twenty three years with DNR. He worked eighteen of these years during the fire season as a NOAA NWS fire weather forecaster. He specializes in fire weather, fire danger, fire behavior, and smoke management weather forecasting. As a computer specialist, he supports their network as well as web pages and provides computer support at wildfires.

**Scott Sistek** (B.S., 1995) is currently KOMO-TV Web and Weather Producer. He has co-authored a book with KOMO 4's Steve Pool entitled, *Somewhere, I Was Right*. Not only does it give readers a fun glance into the secret lives of weathercasters, but has easy-to-understand explanations of the weather patterns that make the Northwest famous, such as our wacky Puget Sound Convergence Zone and Olympic Rain Shadow. You can find more information at [www.stevepool.com](http://www.stevepool.com).



*Major Growth, cont. from page 1*

updated with fast Linux computers for student assignments and electronic labs. In addition, a larger instruments lab was established on the first floor, and work is underway to upgrade materials in support of the instruments' class.

With a larger student body comes greater need for financial assistance, and the department is deeply appreciative of the recent generosity of Richard and Joan Reed in establishing an Endowed Scholarship Fund to pay tuition and/or other expenses for students with either substantial need or exceptional scholarship, and of Peter and Sylvia Hobbs in committing a portion of the proceeds from the sales of the second edition of *Atmospheric Science: An Introductory*

*Survey* by Wallace and Hobbs to scholarships. These scholarships, together with the Bruce Caldwell Memorial Scholarship, will allow the department to provide critical financial assistance to its undergrads.

*Departmental, cont. from page 2*

The Department held an auction on the library of the late **James R. Holton**. Total proceeds reached over \$600.00 to go towards student activities.

In June 2005 **Susan Solomon**, Senior Scientist, NOAA Aeronomy Laboratory, gave a lecture on ozone depletion and climate change as part of the Department of Atmospheric Sciences' Distinguished Lecturer Series.

*Hobbs, cont. from page 1*

extratropical cyclones.

Hobbs' honors and awards include the Jule G. Charney Award and honorary membership in the AMS, and the Senior Alexander von Humboldt Award of the AAAS. Recently he and Research Scientist **Art Rangno** were awarded the WMO/UAE prize in recognition of their work on weather modification. Much more information about Hobbs' professional career, including pictures, news articles and personal reminiscences, can be viewed at <http://carg.atmos.washington.edu/>.

**Welcome to New Graduate Students for 2005 - 2006**

- Erin Burke**, University of Vermont
- Gerald Casson**, University of Washington and University of Virginia
- Chaim Garfinkel**, Cornell University
- Robert Hahn**, Williams College
- Zheng Liu**, University of Science and Technology of China
- Garrett Wedam**, University of Washington
- Qiong Yang**, University of Wyoming and Nanjing Institute of Meteorology
- Laxmi Narasimha Yatavelli**, Ohio University and Bangalore University

## Emeritus Professor Robert Brown

Bob Brown retired from the faculty in 2005. Brown received his B.S. and M.S. degrees from Berkeley and his Ph.D. in Geophysics from the University of Washington in 1969, working with Emeritus Professor Robert G. Fleagle. He spent a year as a postdoc at NCAR, and has been with the department since 1971. He is a fellow of the American Meteorological Society. Bob's primary research areas are planetary boundary layers, air-sea interaction, and satellite remote sensing using scatterom-



*Professor Robert Brown*

etry, and he has authored several books on these topics. His analytical formulation of boundary layer instabilities and rolls, done in his Ph.D. thesis, is known worldwide. In addition to his scientific research, Bob studied in the UW's Master of English Literature program, and has traveled extensively. In 2004 he published a novel, *The Tree: Or the Panzaic Plea* (iUniverse Books).

## Comings and Goings

**Sandra Yuter**, Affiliate Professor, has begun her Assistant Professorship in North Carolina State University's Department of Marine, Earth and Atmospheric Sciences.

**David Catling** returned to the United Kingdom and is a Professor at University of Bristol's Department of Earth Sciences. He is now an Affiliate Associate Professor.

**Eric Salathe**, Ph.D., Research Scientist with Joint Institute for the Study of Atmosphere and Ocean's Climate Impact Group, was appointed Affiliate Professor. Salathe's research includes climate change, regional climate modeling, and climate impacts.

**Daniel Jaffe**, Professor of Atmospheric and Environmental Chemistry, University of Washington Bothell is now an Adjunct Professor. His area of expertise is global and regional atmospheric pollution in the Arctic and Pacific regions.

## Emeritus Professor Marcia Baker

Marcia Baker retired from the faculty in September of 2004. Baker received B.S. and M.S. degrees from Cornell and Stanford, respectively, and received her Ph.D. in physics from the UW in 1971. She then worked in the Civil Engineering and Geophysics departments at the UW, in 1988 becoming a joint professor between the Atmospheric Sciences and the Earth and Space Sciences departments at the UW. Marcia is a fellow of the American Meteorological Society and the Royal Meteorological Society (of the U.K.). Marcia's main research pursuits are in the areas of cloud microphysical processes, cloud electrification, and lightning. Her work has also elucidated the critical role of turbulent mixing in these processes.



*Professor Marcia Baker*

## Undergraduate and Faculty Research

The following undergraduate students and faculty members worked together during the past year:

**David Carey** / Professor Hakim: data assimilation using the ensemble Kalman filter  
**Brett Carlson** / Professor Hartmann: frequency dependence of atmospheric energy and water fluxes

**Sean Casey** / Professor Houze: TRMM satellite observations of hurricanes

**Timothy Downing** / Professor Yuter: scales/characteristics of convective processing in orographic precipitation; global site oceanic precipitation validation

**Ryan Eastman** / Professor Warren: global cloud climatology

**Jeremy Harbeck** / Professor Grenfell: the arctic basin traverse project

**Marta Krynytzky** / Professor Bitz: evaluated Arctic climate change in model runs

**Zachary Oliver** / Professor Houze: TRMM satellite data management

**Charles Smeltzer** / Professor Hartmann: time sampling; eddy head and momentum fluxes

**Garrett Wedam** / Professor Mass: soil-moisture distribution project

## Scholarships and Awards

Richard J. and Joan M. Reed Scholarships:  
**Eric Schoening Charles Smeltzer**

Bruce Caldwell Memorial Scholarships:  
**David Carey Todd Enders  
Matthew Jeglum**

Program on Climate Change First Year  
Fellowship:  
**Reddy Yatavelli**

NASA ESS Fellowship:  
**Jasmine Cetrone**

Outstanding Publication Award, Hydro-spheric and Biospheric Sciences Laboratory in NASA Goddard Space Flight Center:  
**Min-Jeong Kim**



*From left to right: Charles Smeltzer, David Carey, Todd Enders, Eric Schoening, and Matthew Jeglum*

## Transition in Student Advising

**Kathryn Stout** begins her first year as the department's Administrator, stepping in to the position at the same time Don Atkinson becomes Research Coordinator. Kathryn has been Counseling Services Coordinator since 1992 and is excited about the challenges of her new role, though she will miss working with students on a daily basis. She looks forward to working with personnel and financial issues and considers it a privilege to support the University's research. She enjoys working with and being a part of the University community. Her favorite day on campus is the first day of Autumn Quarter because it is rewarding to see all the young people coming to a major university for the first time.

Kathryn loves to cook for friends and



*Samantha Scherer and Kathryn Stout*

family. Some of her other extracurricular activities include gardening, boating, gunk holing, and participating in a book club.

Our new Counseling Services Coordinator **Samantha Scherer** was a Program Coordinator with the University of Washington's Dance Program. She advised dance majors as part of her former job and is pleased to have advising as the focus of her current position.

Samantha spent her first twenty-three years in Missouri and holds an undergraduate degree from Kansas City Art Institute. She moved to Seattle after her undergraduate studies and received a Master of Fine Arts in Printmaking from the University of Washington.

She looks forward to working with students, planning and participating in

educational events, and emphasizing the importance of education. When she is not advising students, she enjoys drawing and painting, playing soccer, hiking, and bicycling.

## Businger Fellowship

Professor Emeritus **Joost Businger** and **Marianne Kooiman** gifted funds to create the Joost A. Businger Endowed Fellowship in Atmospheric Sciences. The endowment will provide financial assistance to graduate students in the department.

## The Department of Atmospheric Sciences Congratulates Its 2005 Graduates

### Doctor of Philosophy Degrees

**Robert Contreras**, *The Effect of Rain on Microwave Backscatter from the Ocean: Measurements and Modeling* (Brown)

**Eric Gritmit**, *Probabilistic Mesoscale Forecast Error Prediction Using Short-Range Ensembles* (Mass)

**Min-Jeong Kim**, *A Physical Model to estimate Snowfall Over Land Using Microwave Measurements* (Houze)

**Daniel Kirshbaum**, *Shallow Convection in Orographic Precipitation* (Durran)

**Roberta Quadrelli**, *Patterns of Climate Variability of the Northern Hemisphere Wintertime Circulation* (Wallace)

**Justin Sharp**, *The Structure and Dynamics of Columbia Gorge Gap Flows Revealed by High-Resolution Numerical-Modeling* (Mass)

**Parikhith Sinha**, *Emissions from Savanna Fires in South Africa* (Hobbs)

### Master of Science Degrees

**Amanda Evans**, *Observations of Cloud Structures and the Growth of Precipitation During the IMPROVE-1 Storm of February 1 - 2, 2001* (Hobbs)

**Shawn Hollars**, *Radiative Regulations in Cloud Behaviors in the Tropical Western Pacific* (Fu)

**Philip Reguluski**, *Sensitivities of the Tropics: Sea Surface Temperatures and Tropical Cyclones* (Hartmann)

**Linda Steinberger**, *Using Space Based Observations of Nitrogen Dioxide and Formaldehyde to Map Biomass Burning Emissions of Nitrogen Oxides and Volatile Organic Carbons over Africa* (Jaeglé)

**Martha Stevens**, *Perturbation Growth in Baroclinic Waves* (Hakim)

### Bachelor of Science Degrees

**Chris Adaniya**

**Sean Casey**

**Gerald Casson**

**Matthew Dewey**

**Ryan Eastman**

**Jeremy Harbeck**

**Jessica Leonard**

**Hai Lu**

**Matt Munson**

**James O'Brien**

**Tisha Oscar**

**Cynthia Peacock**

**Michael Riedy**

**Joshua Smith**

**Jeff Thomason**

**Greg Ulrich**

**Blake Vanpoucke**

**Kyle Wade**

**Garrett Wedam**

## Lau Receives Honor

William Lau (Ph.D., 1977) has been honored by the Seattle Chapter of the Organization of Chinese Americans as the keynote speaker at its annual dinner on January 29, 2005. In attendance to enjoy his inspiring speech were alum Xinhua Cheng (Ph.D., 1993), current faculty Dennis Hartmann and Qiang Fu, and their spouses. After receiving his Ph.D. Bill became an Assistant Professor at the Naval Postgraduate School, but in 1981 he moved



*Bill Lau and his wife Carol Louie, flanked by Muxin Wang and Qiang Fu on the left and Dennis and Lorraine Hartmann on the right, after Bill's speech. (Photo: Northwest Asian Weekly).*

to the NASA Goddard Space Flight Center in Greenbelt, Maryland, where he is now Chief of the Laboratory for Atmospheres. He has received many previous honors including the Clarence Leroy Meisinger Award of the American Meteorological Society and NASA's highest award, the John C. Lindsay Memorial Award.

**DONOR RECOGNITION**

The Department of Atmospheric Sciences gratefully acknowledges the donors who have generously supported us during the past fiscal year July 1, 2004 through June 30, 2005

Andrew S. Ackerman	Todd Christian Dankers	Huang H. Hsu	Dennis G. Opacki	James E. Tillman
Gerhard H. Achtelik	Jean M. Dewart	Ronald S. Irving	Teresa & Donal O'Sullivan	Ryan D. Torn
Becky Alexander	Ioana M. Dima	Roy L. Jenne	Rajul E. Pandya	Norman K. Wagner
Marie C. Ammerman	Dale R. Durran	Philip H. Kahn	W. Randall Poteet	Stephen G. Warren
Franklin I. Badgley	Mickey Stewart	John N. Karamanian	Arthur Rangno & Judy Rossman	Jean & Richard Weick
Robert G. Baughman	Eisenberg	Kristina & Michael Katsaros	Richard J. Reed	Justin J. Wettstein
Louis John Bajuk-Yorgan	Charles E. Elderkin	Stephen A. Klein	Robert W. Reeves	William Whitcomb
Jong-Dao Jou Ben	Robert A. Elleman	Kevin R. Kodama	Dale G. Rogers	Troy E. Wilcox
Harold W. Bernard	Brad S. Ferrier	Karen J. Kowalewsky	Dorothy A. Russell	Robert Wood
Robert S. Berkovitz	Robert G. Fleagle	Dennis Lamb	Steven A. Rutledge	Christopher P. Woods
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S. Edward Boselly III	Qiang Fu & Muyin Wang	Conway B. Leovy	Raymond Clarence Staley	Lixin Zeng
Christopher Bretherton	Timothy J. Garrett	William H. Lipscomb	Ronald K. Surface	Xiaoli Zhu
Richard A. Brintzenhofe	Gregory J. Hakim	Mary Jean McDermott	Jordan Lee Sutton	Xun Zhu
Mary C. Brock	Lucas Harris	Wendy E. & Peter C. Mullen	John Duane Thompson	
Joost A. Businger & M. Kooiman	Halstead Harrison	James R. Murphy	Robert M. Thompson, Jr.	
Steven M. Cavallo	Dennis & Lorraine Hartmann	Frederick N. Murray	Joel A. Thornton	
Eugene E. Chermack	Edward E. Hindman	Thomas R. Newbauer		
Dean & Shervin Churchill	James W. Holcomb, Jr.	Frank S. Nishimoto		
	Joshua Z. Holland	Janice Obuchowski		

## Giving to the Department of Atmospheric Sciences

Please consider supporting the activities of the Department of Atmospheric Sciences. Your gift strengthens the core of the UW through recruitment and retention of world-class students and faculty. Your support of undergraduate and graduate students helps to create the next generation of scientific leaders. Help us to ensure that the department continues to be a leader in weather, climate and air quality.

Yes, I want to support the Department of Atmospheric Sciences!

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Please send your check, payable to the "University of Washington" to:

Dagmar Patterson, Assistant to the Chair  
 Department of Atmospheric Sciences  
 University of Washington, Box 351640  
 Seattle, Washington 98195-1640

## Grad Student Volunteers with Rise n' Shine

by Allison Cabellon

When Matt Garvert arrived in Seattle to attend graduate school at the University of Washington, he planned on more than just obtaining a Ph.D. in Atmospheric Sciences. He also wanted to get involved in the community. While working to achieve his academic goals, Garvert has volunteered for the past five years with Rise n' Shine, a local organization that helps children whose families are affected by HIV/AIDS.

"I grew up in a family in which volunteering was part of what we did," said Garvert. "Rise n' Shine is the best volunteer organization I have been involved with. The personal attention to the families and children is exceptional. Rise n' Shine takes great care to make sure the families do not fall through the cracks. The staff also takes great care of the volunteers, ensuring they are well supported and have the maximum positive impact on the children."

Garvert has served as a mentor, a camp counselor and an assistant camp director.

These roles, especially the first two, have given him the opportunity to personally connect with children and teens. "The camp offers kids the opportunity to interact with other kids whose day to day lives are surrounded by AIDS in a non-judgmental and caring environment. Unfortunately, there still is a substantial negative stigma associated with AIDS, which these kids feel every day. Camp, in many cases, is the one week of the year that these kids get to be kids. A lot of them are caregivers to their sick parents and siblings, and they take on unfathomable responsibilities at young ages."

Garvert has no trouble balancing his time for school and volunteering. "Rise n' Shine has become an important aspect of my life, which I do not mind investing time in. If something is important, you just end up making time."

At the UW, Garvert is involved with the Improvement of Microphysical Parameterizations Through Observational Verifica-

tion Experiments (IMPROVE) project, supervised by Professor Cliff Mass. Garvert has focused on analyzing a numerical model's simulation of clouds and precipitation over the Oregon Cascades with an extensive observational data set which includes detailed microphysical flight measurements and Doppler radar.

His career goals include remaining in academia, researching and teaching at the undergraduate level. "I enjoy researching and I hope to continue doing it, but I also have found teaching to be a fulfilling profession and one that I would like to further explore."

For more information about Rise n' Shine, visit [www.risenshine.org](http://www.risenshine.org). Excerpts from Matt Garvert's quotes in the Dec. 10, 2003 Seattle Post-Intelligencer article printed by permission.

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