

Lamont-Doherty Earth Observatory  
of Columbia University  
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**Education**

- 1994     **Ph.D., Duke University**, Botany  
*Thesis:* Effects of resource availability on carbon utilization in *Pinus taeda* L. and *Pinus ponderosa* Dougl. Ex Laws. seedlings. (Sponsor: Dr. Boyd Strain)
- 1987     **M.E.S., Yale University**, School of Forestry and Environmental Studies
- 1985     **B.A., Whittier College**, Environmental Studies

**Professional Experience**

- 2011-present   **Professor**, Department of Earth and Environmental Sciences, Columbia University, New York  
**Professor**, Department of Ecology, Evolution and Environmental Biology, Columbia University, New York
- 2007-present   **Co-Director**, Undergraduate Special Concentration in Sustainable Development (<http://www.earth.columbia.edu>)
- 2006-present   **Vice President**, Black Rock Forest Consortium, Cornwall, New York (<http://www.blackrockforest.org>)
- 2011           **Acting Executive Director**, Black Rock Forest Consortium, Cornwall, New York, (July- December)
- 2009-2012     **Visiting Professor**, University Center for International Education, Waseda University, Tokyo Japan.
- 2002-2010     **Associate Professor**, Department of Earth and Environmental Sciences, Columbia University, New York
- 2005           **Erskine Fellow**, Department of Biology, University of Canterbury, Christchurch, New Zealand
- 1997-2002     **Assistant Professor**, Department of Earth and Environmental Sciences, Columbia University, New York
- 1996-1997     **Assistant Research Professor**, Biological Sciences, Desert Research Institute, Reno, Nevada
- 1996-1997     **Acting Director**, Frits Went Laboratory, Desert Research Institute, Reno, Nevada
- 1994-1996     **Global Change Distinguished Postdoctoral Fellow** (US Department of Energy), Desert Research Institute, Reno, Nevada
- 1990-1994     **Graduate Research Assistant**, Department of Botany, Duke University, Durham, North Carolina
- 1988-1990     **Laboratory Technician**, Carnegie Institution of Washington, Stanford, California
- 1987-1988     **Biological Technician**, US Forest Service, New Haven, Connecticut
- 1985-1987     **Graduate Research Assistant**, Yale School of Forestry, New Haven, Connecticut

### **Courses Taught (Columbia)**

EESC 2300 **The Life System**, Fall 1997, Spring 1999 – 2005, 2007-2011  
EESC 2330 **Science For Sustainable Development**, Spring 2008  
EESC 4550 **Plant Ecophysiology**, Fall 1998, 1999, 2000, 2002, 2004, 2006, 2009, 2010  
EESC 9500 **Plant Physiological Ecology Seminar**, Spring & Fall 2001 – 2010, Fall 2012  
EEEB 4100 **Forest Ecology**, Fall 2008, 2010, 2012  
EESC 9500 **Ecosystem Ecology Seminar**, Fall 2003  
EESC 2100 **The Climate System**, Spring 1998, Spring 1999, Spring 2005  
EESC 6112 **Ecology I**, Fall 1998, 1999, 2000 & 2001  
EEEB 6150 **Land Use Transitions In The Tropics**, Fall 2007 (Organized by M. Uriarte)  
SDEV 3500 **EI-Lamont Sustainable Development Practicum**, Fall 2008, 2010, Spring 2009  
SDEV 1900 **Introduction to Sustainable Development**, Spring 2011  
EEEB 9501 **Directed Research**, Fall 2008, 2010, 2012  
EEEB 6150 **Ecohydrology Seminar**, Spring 2010 (Organized by S. Naeem)

**Global Seminar on Sustainability** – Global Honors College, Waseda University, Tokyo Japan,  
Summer 2009, 2010 & 2011 (<http://seminar.globalhonorscollege.org/>)

**Photosynthesis And Respiration In Plants And Ecosystems In A Global Change Scenario** –  
Advanced topics in Plant Physiology, University of São Paulo, Brazil, Feb 2012

### **University Service**

Lamont Directors Search Committee, 2011  
Executive Committee of the Faculty of Arts and Sciences, 2009/2010  
Faculty Quality of Life (Work/Life) Committee 2010- 2011  
Co-Director, Undergraduate Program in Sustainable Development, 2007-present  
Earth Institute Education Sub-Committee, 2007-present  
Graduate Student Admissions Committee, 1997-2010 (Chair 2005)  
Committee On Undergraduate Education, 1998-2000  
Planning Sub-committee of the Lamont-Doherty Executive Committee, 1999-2001  
Lamont Postdoctoral Fellows Selection Committee, 1999, 2001, 2003  
Lamont Mentoring Award Selection Committee, 2001 – 2003, 2007  
Faculty-Student Relations: 2001 – 2011 (Chair 2007&2008)  
Advisor of Record appointment committee 2008 – 2011 (Chair 2008)  
Faculty Search Committees, EEEB, 2003, 2007, 2011  
Faculty Search Committee, LDEO 2008/2009  
Adjunct Faculty Search Committee DEES/LDEO 2008/2009  
Faculty Search Committee DEES 2010&2011

### **Awards**

**Lamont Excellence in Mentoring** – 2004

**Professor of the Year** – 2007 (Graduate students, Department of Earth and Environmental Sciences)

**Erskine Fellow** – 2005 University of Canterbury, Christchurch, New Zealand

## **Undergraduate Students Advised**

**Matt Yospin**, Columbia University, DEES, Senior Essay and Research, 1998

**Ami Patel**, Barnard College, Senior Thesis, 1998

**Guerric Bazin**, Ecole Superieure d'Ingenieurs et de Techniciens pour l'Agriculture, Rouen FR,  
Visiting Scholar 1999

**Katherine Greive**, Barnard College, Independent Research Project, 2000

**Lisa Patrick**, Barnard College, Independent Research Project, 2000, 2001 & 2002

**Howard Fung**, American Museum of Natural History, Pre College Science Collaborative,  
2000/2001

**Katherine Kurtz**, Barnard College, Senior Thesis, 2002 & 2003 (*Thesis received Honors*)

**Alisa Nakamine**, Columbia University, Work Study, 2003

**Kawana Lewis**, Columbia University, Summer Internship, 2003, Senior Thesis, 2005

**Stephanie Searle**, Columbia University, Directed Research, 2007

**Victor De Troy**, Columbia University, Senior Thesis 2007

**Mia Lewis**, Columbia University, FOSTER intern 2007

**Yasmine Koukaz**, Columbia University, undergraduate research assistant 2007

**Charlene Lee**, Columbia University, FOSTER intern 2008

**Sam Thomas**, Columbia University, Senior Thesis 2008&2009

**Heather Greaves**, Columbia University, Senior Thesis 2008&2009

**Danielle Bitterman**, Columbia University, LDEO intern, 2009, Senior Thesis 2009&2010  
(*Thesis received Honors*)

**Miguel Macias**, Columbia University, Senior Thesis 2009, 2010 & 2011

**Rex Chen**, Columbia University, LDEO intern, 2009

**Gregory Pendergast**, Columbia University, Senior Thesis 2011

**Adam Formica**, Columbia University, Senior Thesis 2012

## **Officially Advised Graduate Students and Post-docs**

**Mark Potosnak**, Columbia University, Earth and Environmental Sciences

MSc. September 1997

M. Phil March 2000

Ph.D. January 2002

*Thesis: Effects of growth carbon dioxide concentration on isoprene emissions from plants*

*Current Position*, Assistant Professor, DePaul, Chicago, Ill

**Victor Engel**, Columbia University, Earth and Environmental Sciences

M.Phil March 2000

Ph.D. April 2002

*Thesis: Biophysical controls on canopy water balance*

*Current Position*, Hydrologist, Everglades National Park, FL.

**Jennifer Nagel**, Columbia University, Earth and Environmental Sciences

ESS&J student (research project), 1999

MSc. March 2000

M.Phil March 2001

Ph.D. December 2002

*Thesis: Plant energetic processes and their response to global change as a physiological mechanism of competitive success*

*Current Position*, Assistant Professor, University of Tennessee, Chattanooga.

**Natalie Boelman**, Columbia University, Earth and Environmental Sciences

MSc. March 2001

M.Phil March 2002

Ph.D. September 2004

*Thesis: Relating NDVI to Ecosystem Form & Function at Multiple Spatial Scales.*

*Current Position*, Associate Research Scientist, LDEO - Columbia University.

**Neil Pederson**, Columbia University Earth and Environmental Sciences (advisory committee)

M.Phil March 2002

Ph.D. July 2005

*Thesis: Climatic Sensitivity and Growth of Southern Temperate Trees in the Eastern US: Implications for the Carbon Cycle.*

*Current Position*, Lamont Research Professor, Columbia University.

**Josslyn Shapiro**, Columbia University, Earth and Environmental Sciences

MSc. February 2002

M.Phil March 2003

Ph.D. December 2005

*Thesis: Watershed Budgets of Cl<sup>-</sup> and SO<sub>4</sub><sup>2-</sup> as Integrators of Ecosystem Processes*

*Current Position*, Research Scientists, NY DEC.

**William Bowman**, Columbia University (Ecological, Evolutionary and Environmental Biology)

Ph.D. December 2005

*Thesis: Respiratory Ecophysiology of Woody Stems and Branches in Temperate Forest Trees.*

*Current Position*, Consultant, Land Use Ecological Services, Riverhead, NY.

**Chengyuan Xu**, Columbia University, Earth and Environmental Sciences

MSc. March 2003

M. Phil March 2004

Ph.D. May 2006

*Thesis: Foliar dark respiration: scaling gas exchange characteristics and isotopic signals from leaf to canopy/ ecosystem level.*

*Current Position*, Collaborative Research Network Senior Research Fellow

University of Sunshine Coast Research Futures Project

(based in Griffith University)

**Jennifer Levy**, Columbia University, Earth and Environmental Sciences

MSc. March 2008,

M.Phil March 2009,

Ph.D. May 2012

*Thesis: Belowground carbon pools and fluxes in a northern temperate deciduous forest and their response to stand disturbance.*

*Current Position*, Postdoctoral Research Fellow Princeton University

**Mary Heskell**, Columbia University, Ecological, Evolutionary and Environmental Biology,

Ph.D. candidate - present

**Miriam Marlier**, Columbia University, Earth and Environmental Sciences

MSc. March 2010

M.Phil March 2011  
Ph.D. candidate – present  
**Angelica Patterson**, Columbia University, Earth and Environmental Sciences

*Second Reader:*

**Miriam Jones** - (Earth and Environmental Sciences PhD student), graduated 2008  
**Jinbao Li** - (Earth and Environmental Sciences PhD student) – graduated 2009  
**Nancy Dammann** - (Ecological, Evolutionary and Environmental Biology) – graduated 2009  
**Dan Flynn** - (Ecological, Evolutionary and Environmental Biology) – graduated 2011  
**Jason Sircely** - (Ecological, Evolutionary and Environmental Biology) – graduated 2011  
**Eli Dueker** - (Earth and Environmental Sciences PhD student) – graduated 2012  
**Sanpisa Sritrairat** - (Earth and Environmental Sciences PhD student) - graduated 2012  
**Case Prager** - (Ecological, Evolutionary and Environmental Biology) - present

**Sara Pratt**, Columbia University, ESS&J student (research project), 1999  
**Kristine Xu**, Columbia University, ESS&J student (research project), 2002  
**John Rowden**, Columbia University, ESS&J student (research project), 2002  
**David Epstein**, Columbia University, ESS&J student (research project), 2003  
**Jeneen Interlandi**, Columbia University, ESS&J student (research project), 2005  
**Emily Mulhausen**, Columbia University, ESS&J student (research project), 2007  
**Adi Narayan**, Columbia University, ESS&J student (committee member), 2008  
**Katherine Bagley**, Columbia University, ESS&J student (committee member), 2008

**Tanja Crk**, Columbia University, E3B Masters student (committee member), 2007  
**Diana Hsueh**, Columbia University, E3B Masters student (advisor), 2008  
**Nancy Falxa-Raymond**, Columbia University, E3B Masters student (advisor), 2010/2011  
**Cassie Freund**, Columbia University, E3B Masters student (committee member), 2011/2012

**Hector Maza Cabezas**, Universidad del Pais Vasco, Visiting Scholar - 1997&1998  
**Roger Dungen**, Lincoln University, New Zealand, Outside Thesis Reader – 2002  
**Aaron Kimple**, Bard College, Outside Thesis Reader – 2002  
**Stephanie Searle**, University of Canterbury, Christchurch New Zealand – 2011.  
**Ari Korfeld**, University of Canterbury, Christchurch New Zealand – 2012  
**Ika Dujik**, Institute of Soil Research, University of Natural Resources and Applied Life Sciences, Vienna – Marshal Plan Fellow, 2009

**Dr. Andrew Peterson**, Lamont Fellow, Columbia University – 1999.

*Current Position:* Statistical Analysis, Industry

**Dr. Kim Brown**, Columbia University –2001-2002

*Current Position:* Education Manager, Franklin Park Conservatory

**Dr. Xianzhong Wang**, Earth Institute Fellow, Columbia University – 2001-2002

*Current Position:* Associate Professor, Indiana University/Purdue University

**Dr. William Wright**, Lamont Fellow, Columbia University – 2003-2004 (Co-Advisor)

*Current Position:* Visiting Research Fellow, Center for Environmental Changes, Academia Sinica, Taiwan

## Grants Received

- Custom Leaf Cuvette For Simultaneous Measurements of the Thermal Tolerance of Photosynthesis and Respiration. **Observatory Technical and Innovation Center**. 2010-2011. \$18,995/1year (PI).
- Total Below Ground Carbon Budget in Black Rock Forest: A Second Year Assessment for the Ecosystem Consequences of Foundation Taxon Loss project. **Stiefel Foundation Small Grants for Scientific Research**. 2010-2011. \$5,000/1year (PI).
- An assessment on the effects of girdling on nitrogen availability, foliar nitrogen content and nitrogen reduction of red oak (*Quercus rubra*) and witch-hazel (*Hamamelis virginiana*) in Black Rock Forest. – Direct funding from **Black Rock Forest**. \$1,030/1year (PI).
- Local Fossil Fuel Contributions to Atmospheric CO<sub>2</sub> in New York City. **The Climate Center**, Lamont-Doherty Earth Observatory, Columbia University. \$6,920/1year (PI).
- ULTRA-Ex: Exploring Linkages Between Ecosystem Services, Public Health and the Green Area Factor in New York City. **National Science Foundation**. 2010-2012, \$298,989 /2 years (PI).
- IPY: Autotrophic Respiration in a Changing Arctic Climate: Mechanistic Responses and Ecosystem Consequences. **National Science Foundation**. 2008-2010, \$398,000/3 years (PI).
- Total below ground carbon allocation in Black Rock Forest: An initial assessment for the ecosystem consequences of foundation taxon loss project. **Black Rock Forest Consortium**. 2007, \$4,500/1 year (PI).
- Futile or adaptive? The role of alternative oxidase in the acclimation of plant respiration to environmental change. **Royal New Zealand Marsden Fund**. 2007-2010, \$806,331 (NZ\$)/3 years (Co-PI).
- Out of the darkness: predicting rates of respiration of illuminated leaves along nutrient gradients. **Australian Research Council (ARC)**. 2008-2010, \$588,000 (Aus\$)/3 years (Co-PI).
- Atmospheric CO<sub>2</sub> and the Growth of Trees in New York City as determined from <sup>14</sup>C in Leaves and Tree Rings. **Comer Science and Educational Foundation**. 2006, \$4,800/1 year (PI).
- Course Transportation Support – EESC 4550, Plant Physiological Ecology. **The Earth Institute**, Columbia University. 2006, \$2,600/1 year (PI).
- Does The Reduced Diurnal Temperature Range Of NYC Increase The Growth Of *Quercus rubra*? **Lamont Climate Center**. 2006, \$4,350/1 year (PI).
- Sensors for the Pilot Project-Ecosystem Consequences of foundation taxon loss: The future of oak forests. **Black Rock Forest Consortium**. 2006, \$5,998/1 year (PI).
- Determining the NYC Atmospheric CO<sub>2</sub> Dome from <sup>14</sup>C in Tree Rings. **Lamont Climate Center**. 2005, \$6,027/18 months (PI).
- Effect of Night Time Temperature Increases on the Growth and Physiology of *Xanthium Strumarium*. **Comer Science and Educational Foundation**. 2005, \$3,100/1 year (PI).
- Carbon and Nitrogen in Above-Ground Biomass at Black Rock Forest. **Black Rock Forest Consortium**. 2005, \$5,000 1 year (PI).
- The use of alligator weed (*Alternanthera philoxeroides*) to remove CO<sub>2</sub> from a simulated power plant flue gas. **EAC Limited**. 2005, \$40,000/1 year (PI).

The Effect of Leaf Longevity on the Carbon Gain and Growth of Japanese Barberry. **Black Rock Forest Consortium**. 2004, \$2,770 1 year (PI).

The potential role of physiology in the age-related decline of red oak productivity at Black Rock Forest. **Black Rock Forest Consortium**. 2003, \$9,750/ 1 year (PI).

Land-water interaction at the catchment scale: linking biogeochemistry and hydrology. **National Science Foundation**, Biocomplexity. 2002, \$1,411,660/ 4 years (Co-PI).

The contribution of woody tissue respiration to the carbon balance of an old-growth podocarp forest ecosystem in New Zealand. **National Science Foundation**, International Opportunities for Scientist and Engineers. 2002, \$25,000/ 3 years (PI).

A greenhouse for plant physiological and ecological research. **Comer Science and Educational Foundation**. 2002, \$98,367/1 year (PI).

Do energy and resource use efficiency influence invasive success of Japanese Barberry (*Berberis thunbergii*)? **Black Rock Forest Consortium**. 2002, \$5000/ 1 year (PI).

Effects of developmental changes on the physiological processes that regulate photosynthetic responses to climate change. **National Science Foundation**, Integrative Plant Biology. 2001, \$225,000/ 3 years (Co-PI).

Remote Detection of Sun and Shade Leaf Area for Three Tree Species in the Cascade Brook Watershed in Black Rock Forest, NY. **Black Rock Forest Consortium**. 2000, \$1,900/ 1 year (Co-PI).

Carbon Dioxide, Cottonwoods, and Corals: Investigating CO<sub>2</sub> impacts on ecosystem processes using experimental approaches. **Packard Foundation**. 1999, \$960,000/ 5 years (Co-PI).

Measurement of Branch-level Gas Exchange at the Biosphere 2 Center. **Climate Center of Lamont-Doherty Earth Observatory**. 1999, \$4995/ 1 year (Co-PI).

Environmental & Biological Limitations to Tree Growth in Native Podocarp-Angiosperm Forests. **Timberlands West Coast Ltd**. 1999, Donation of labor for the construction of a canopy access tower in Okarito Lagoon, New Zealand (Co-PI).

Native New Zealand Conifers: The Implications of 150 Million Years of Isolation and Unique Physiological Function. **Center For Environmental Research and Conservation - Columbia University**. 1999, \$20,000/ 1 year (PI).

Undergraduate Internships in Earth System Research at Biosphere 2 Center. **National Aeronautical and Space Administration**. 1997, \$225,000/ 3 years (Co-PI).

Measurement of Evapotranspiration Above Black Rock Forest. **Climate Center of Lamont-Doherty Earth Observatory**. 1998, \$6000/ 1 year (PI).

Environmental Controls on Tree Growth: A Comparison between the Cascade Brook Watershed of Black Rock Forest, NY and a Native New Zealand Forest. **Andrew W. Mellon Foundation**. 1998, \$245,000/ 3 years (PI).

Native New Zealand Conifers: The Implications of 150 Million Years of Isolation and Unique Physiological Function. **Center For Environmental Research and Conservation - Columbia University**. 1998, \$9,000/ 1 year (PI).

Seasonal and Topographical Variation in Water Availability: Implications for Carbon and Nitrogen Cycling in the Cascade Watershed of Black Rock Forest. **Black Rock Forest Consortium**. 1998, \$4,849 / 1 year (PI).

Plant Respiration in Elevated CO<sub>2</sub>: Mechanisms of Response. **National Science Foundation**, Integrative Plant Biology. 1997, \$256,000/ 3 years (PI).

Biochemical Mechanisms Controlling Leaf Expansion and Tree Response to Elevated CO<sub>2</sub>. **National Science Foundation**, International Opportunities for Scientist and Engineers. 1996, \$35,000/ 2 years (Co-PI).

Direct Effects of Elevated CO<sub>2</sub> on Apparent Dark Respiration. Nevada **EPSCoR** proposal development funds. 1996, \$4,000 / 3 months (PI).

Assessment of the Effect of the Variable Biosphere 2 Atmosphere on Plant Responses to Elevated CO<sub>2</sub>. **Biosphere 2 Center**, Research Incentive Grant. 1996, \$25,000/ 1 year (Co-PI).

Global Change Distinguished Postdoctoral Fellowship, **U.S. Department of Energy**. 1994 \$74,000/ 2 years (PI).

Robert R. Bryden Graduate Research Award, **North Carolina Academy of Sciences**. 1991 & 1992. \$500 / 1 year (PI).

Student Research Award, **Catherine Kiever/Duke Botany Department**. 1991 \$500/ 1 year (PI).

Student Research Award, **Mellon Foundation**. 1986, \$500/ 1 year (PI).

### **Societies and Activities**

**Sigma Xi** – *Kappa Chapter Secretary* (2003)

**Editorial Review Board** – Tree Physiology

**Associate Editor** – Plant Ecology (2006)

**Reviewer:** *Arctic and Alpine Research, Annals of Botany, Canadian Journal of Forest Research, Ecological Applications, Ecology, FEBS Letters, Forest Science, Functional Ecology, Great Basin Naturalist, Global Change Biology, Journal of Experimental Botany, Nature, New Phytologist, Oecologia, Physiologia Plantarum, Plant, Cell & Environment, Plant Physiology, Plant and Soil, Tree Physiology*

*NSF - Ecological and Evolutionary Physiology Program, Ecology Program, Ecosystems Program, Emerging Frontiers in Research and Innovation-Photosynthetic Biorefineries*

*NEON RFI, Panel Member – October 2003, 2004 & 2007*

*DOE - Terrestrial Carbon Processes Program, NICCR*

*USDA – Plant Responses to the Environment*

**NEON Tiger Team (NSF)** - *Global Change Experiments 2007*

**Toolik Lake Field Station Steering Committee**, 2008

**Black Rock Forest Consortium** – Vice President, 2006 – present

**Black Rock Forest Consortium** – Acting Executive Director, July - Dec 2011

### **Invited Seminars**

1. Department of Biology, **Texas Tech University**, Lubbock, Texas, December 5, 1995
2. Lamont-Doherty Earth Observatory, **Columbia University**, Palisades, New York, April 22, 1996
3. NASA **Goddard Institute for Space Studies**, New York, New York, April 24, 1996
4. Department of Plant Biology, **University of Illinois**, Urbana-Campaign, Illinois, October 9, 1996
5. Department of Plant Biology, **Carnegie Institution of Washington**, Stanford, California, November 26, 1996.
6. Critical assessment of the response of forest ecosystems to elevated atmospheric carbon dioxide, 3rd International IGBP-GCTE workshop, **Duke University**, Durham, NC, October 13, 1997



7. Department of Environmental Sciences, **Rutgers University**, New Brunswick, NJ, October 24, 1997
8. **Landcare Research Institute**, Lincoln, New Zealand, November 1997
9. Department of Biology, **Long Island University**, Southampton, NY, March 11, 1998
10. **Harvard Forest**, Petersham, MA, March 6, 1998
11. Lamont-Doherty Earth Observatory, **Columbia University**, Palisades, New York, September 18, 1998
12. **Pearl River High School Science Honors Society**, Pearl River, New York, December 4, 1998
13. Department of Biology, **Columbia University**, New York, New York, December 11, 1998
14. Department of Ecology and Evolution, **State University of New York**, Stony Brook, New York, November 17, 1999
15. Board of Directors, **Black Rock Forest**, New York, New York, November 22, 1999
16. Department of Biology, **Fordham University**, Bronx, New York, September 6, 2000
17. Ewing Symposium – *The Controversial Aspects Of The Contemporary Carbon Cycle*, **Lamont-Doherty Earth Observatory**, Columbia University, Palisades New York, October 27, 2000.
18. Pre College Science Program, **American Museum of Natural History**, NY, NY, April 5, 2001.
19. 7<sup>th</sup> Annual Symposium on **German-American Frontiers of Science**. Bad Homburg Germany, June 10, 2001.
20. **Institute for Ecosystems Studies**, Millbrook, NY, October 26 2001.
21. Department of Biology, **Rutgers University**, Newark, New Jersey, November 7, 2001.
22. Department of Botany, **University of Toronto**, Toronto, Canada, February 7, 2002
23. Department of Biology, **University of California, Santa Barbara**, February 14, 2002.
24. Department of Biology, **City College of New York**, NYC, NY, September 23, 2002.
25. Department of Integrative Biology, **University of Illinois**, Urbana, IL, September 25, 2002.
26. Department of Forest Resources, **University of Minnesota**, St. Paul, MN, November 13, 2002.
27. Annals of Botany Plenary Address, **ComBio 2003**, Melbourne, Australia, October 1, 2003.
28. Department of Forestry, **University of Toronto**, Toronto, Canada, November, 2004
29. Department of Botany II, **Universität Würzburg**, Würzburg, Germany, July 23, 2004
30. Department of Biology, **Texas Tech University**, Lubbock, Texas, March 9, 2005
31. Department of Biology, **University of Canterbury**, Christchurch, NZ, April 5, 2006.
32. The Ecosystems Center, **Marine Biological Laboratory**, Woods Hole, MA, March 4, 2008.
33. Café Science, **Columbia University**, New York, NY, September 8, 2008.
34. Consilience, Dialogs, **Columbia University** New York, NY, November 12, 2008.
35. Department of Biological Sciences, **Lehman College**, October 5 2009.
36. **Cary Institute of Ecosystem Studies**, Millbrook, NY, October 29 2009.
37. **24<sup>th</sup> New Phytologist Symposium**, St. Hughes College, Oxford UK, April 14<sup>th</sup> 2010.
38. **IUFRO Sir Mark Oliphant Conference: Canopy processes in a changing climate**, South East Australia, October 12<sup>th</sup>, 2010.
39. **Hudson Highlands Nature Museum**, Cornwall, NY, November 6<sup>th</sup>, 2012.
40. **Warming Arctic, Changing Planet**, New York, NY, November 13<sup>th</sup>, 2012. (<http://www.earth.columbia.edu/videos/watch/449>)

**Publications** (102 total publications, of which 96 easily show on an ISI search of “Griffin KL”. As of February 5, 2013 these 96 publications have 3,064 citations or an average of 34.05 citations per publication for an h-index of 33. Eighteen papers have more than 50 citations, 3 papers have more than 100 citations and 2 papers have more than 200 citations.)

1. Fredeen A.F., **Griffin** K. & Field C.B. (1991) Effects of light quantity and quality and soil nitrogen status on nitrate reductase activity in rainforest species of the genus *Piper*. *Oecologia*, **86**, 441-446.
2. **Griffin** K.L., Thomas R.B. & Strain B.R. (1993) Effects of nitrogen supply and elevated carbon dioxide on construction cost in leaves of *Pinus taeda* (L.) seedlings. *Oecologia*, **95**, 575-580.
3. Peñuelas J., Gamon J.A., **Griffin** K.L. & Field C.B. (1993) Assessing community type, plant biomass, pigment composition, and photosynthetic efficiency of aquatic vegetation from spectral reflectance. *Remote Sensing of Environment*, **46**, 110-118.
4. Thomas R.B. & **Griffin** K.L. (1994) Direct and indirect effects of atmospheric carbon dioxide enrichment on leaf respiration of *Glycine max* (L.) Merr. *Plant Physiology*, **104**, 355-361.
5. **Griffin** K.L. (1994) Calorimetric estimates of construction cost and their use in ecological studies. *Functional Ecology*, **8**, 551-562.
6. Lewis J.D., **Griffin** K.L., Thomas R.B. & Strain B.R. (1994) Phosphorus supply affects the acclimation of photosynthesis in loblolly pine to elevated carbon dioxide. *Tree Physiology*, **14**, 1229-1244.
7. Gamon J.A., Field C.B., Joel G., Goulden M.L., **Griffin** K.L., Hartley A.E., Peñuelas J., & Valentini R.A. (1995) Relationships between NDVI, canopy structure, and photosynthesis in three Californian vegetation types. *Ecological Applications*, **5**, 28-41.
8. Tissue D.T., **Griffin** K.L., Thomas R.B. & Strain B.R. (1994) Effects of low and elevated CO<sub>2</sub> on C<sub>3</sub> and C<sub>4</sub> Annuals. II. Photosynthesis and biochemistry. *Oecologia*, **101**, 21-28.
9. **Griffin** K.L., Winner W.E. & Strain B.R. (1995) Growth and biomass partitioning in loblolly and ponderosa pine seedlings in response to carbon and nitrogen availability. *New Phytologist*, **129**, 547-556.
10. **Griffin** K.L., Ball J.T. & Strain B.R. (1996) Direct and indirect effects of elevated CO<sub>2</sub> on whole shoot respiration in ponderosa pine seedlings. *Tree Physiology*, **16**, 33-41.
11. **Griffin** K.L. Winner W.E. & Strain B.R. (1996) Construction cost of loblolly and ponderosa pine leaves grown with varying carbon and nitrogen availability. *Plant, Cell and Environment*, **19**, 729-738.
12. **Griffin** K.L. & Seemann, J.R. (1996) Plants, CO<sub>2</sub> and photosynthesis in the 21st century *Chemistry & Biology*, **3**, 245-254.
13. **Griffin** K.L. & Luo Y. (1996) Plants, Paleo Climate and CO<sub>2</sub>: a review of ESA symposium #3, Transdisciplinary Evidence for Biome Responses to CO<sub>2</sub> \* Climate Change across Glacial/Interglacial Boundaries. *Bulletin of the Ecological Society of America*, **77**, 164-166.
14. **Griffin** K.L., Ross P.D., Sims D.A., Luo Y., Seemann J.R., Fox C.A. & Ball J.T. (1996) EcoCells: A tool for mesocosm scale measurements of gas exchange. *Plant, Cell and Environment*, **19**, 1210-1222.
15. Poorter, H., van Berkel Y., Baxter R., den Hertog J., Dijkstra P., Gifford R.M., **Griffin** K.L., Roumet C. Roy J. & Wong S.C. (1996) The effect of elevated CO<sub>2</sub> on the chemical

- composition and construction costs of leaves of 27 C<sub>3</sub> species. *Plant, Cell and Environment*, **20**, 472-482.
16. BassiriRad H., **Griffin** K.L., Strain B.R. and Reynolds J.F. (1996) Effects of CO<sub>2</sub> enrichment on growth and root <sup>15</sup>NH<sub>4</sub><sup>+</sup> uptake rate of loblolly pine and ponderosa pine seedlings. *Tree Physiology*, **16**, 957-962.
  17. **Griffin** K.L., Bashkin M.A., Thomas R.B. & Strain B.R. (1997) Interactive effects of soil nitrogen and atmospheric carbon dioxide on root system carbon dioxide efflux from loblolly and ponderosa pine seedlings. *Plant and Soil*, **190**, 11-18.
  18. BassiriRad H., **Griffin** K.L., Reynolds, J.F. & Strain B.R. (1997) Change in root NH<sub>4</sub><sup>+</sup> and NO<sub>3</sub><sup>-</sup> absorption rate of loblolly and ponderosa pine in response to CO<sub>2</sub> enrichment. *Plant and Soil*, **190**, 1-9.
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