

Jianwu Tang

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EDUCATION

University of California, Berkeley	Ecosystem Sciences	Ph.D. 2003
Peking University, China	Environmental Sciences	M.S. 1995
Peking University, China	Geology	B.S. 1992

PROFESSIONAL APPOINTMENTS

1/2008-present	Assistant scientist at Ecosystems Center, Marine Biological Laboratory
7/2009-present	Assistant professor at Brown University (Brown-MBL joint program)
10/2006-12/2007	Research scientist at Chicago Botanic Garden
10/2006-12/2007	Adjunct assistant professor at Northwestern University
5/2004-10/2006	Research associate, Dept. of Forest Resources, University of Minnesota
6/2003-4/2004	Postdoctoral researcher, Dept. of Environmental Science, Policy and Management, University of California at Berkeley
7/1999-5/2003	Graduate student researcher, Dept. of Environmental Science, Policy and Management, University of California at Berkeley
7/1995-6/1999	Assistant professor and lecturer, Center for Environmental Sciences at Peking University, China

TEACHING EXPERIENCE

2008-present	“Semester in Environmental Sciences” at MBL each fall on the topic of soil respiration and soil-plant interactions
9/2007-12/2007	Ecosystem Ecology (PBC 405), Northwestern University
1/2006-5/2006	Biosphere-Atmosphere Interactions (FR 5480), University of Minnesota
7/1995-6/1999	Environmental Sciences, and Ecological Impact Assessment, Peking University, China.

PUBLICATIONS

In peer-reviewed journals (total SCI citation = 423, H-index = 11 as of March 2010)

- Janssens I.A, W. Dieleman, S. Luyssaert, J.-A. Subke, M. Reichstein, R. Ceulemans, P. Ciais, A.J. Dolman, J. Grace, G. Matteucci, D. Papale, S.L. Piao, E.-D. Schulze, **J. Tang**, B.E. Law, 2010. Reduction of forest soil respiration in response to nitrogen deposition, *Nature Geoscience* (in press).
- Vargas R., D. Baldocchi, M. Allen, M. Bahn, T. Black, S. Collins, J. Curiel Yuste, T. Hirano, R. Jassal, J. Pumpanen, **J. Tang**, 2010. Looking deeper into the soil: biophysical controls and seasonal lags of soil CO₂ production and efflux across multiple vegetation types. *Ecological Applications* (in press).
- Bahn M., M. Reichstein, E. A. Davidson, J. Grünzweig, M. Jung, M. S. Carbone, D. Epron, L. Misson, Y. Nouvellon, O. Roupsard, K. Savage, S. E. Trumbore, C. Gimeno, J. Curiel Yuste, **J. Tang**, R. Vargas, and I. A. Janssens, 2009. Soil respiration at mean annual

- temperature predicts annual total across vegetation types and biomes. *Biogeosciences Discuss*, 6, 11501-11520 (www.biogeosciences-discuss.net/6/11501/2009/).
- Tang, J.**, P.V. Bolstad, J.G. Martin, 2009. Soil carbon fluxes and stocks in a Great Lakes forest chronosequence. *Global Change Biology*, 15: 145-155.
- Tang, J.**, P.V. Bolstad, A.R. Desai, J.G. Martin, B.D. Cook, K.J. Davis, E.V. Carey, 2008. Ecosystem respiration and its components in an old-growth forest in the Great Lakes region of the United States. *Agricultural and Forest Meteorology*, 148: 171-185.
- Ewers, B.E., D.S. Mackay, **J. Tang**, P. Bolstad, S. Samanta, 2008. Intercomparison of sugar maple stand transpiration responses to environmental conditions from the western Great Lakes Region of the United States. *Agricultural and Forest Meteorology*, 148: 231-246.
- Desai, A.R., A.N. Noormets, P.V. Bolstad, J. Chen, B.D. Cook, P.V. Curtis, K.J. Davis, E.S. Euskirchen, C. Gough, J.M. Martin, D.M. Ricciuto, H.P. Schmid, H. Su, **J. Tang**, C. Vogel, W. Wang, 2008. Influence of vegetation type, stand age and climate on carbon dioxide fluxes across the Upper Midwest, USA: Implications for regional scaling of carbon flux. *Agricultural and Forest Meteorology*, 148: 288-308.
- Luyssaert S., I. Inglima, M. Jung, A.D. Richardson, M. Reichstein, D. Papale, S.L. Piao, E.D. Schulze, L. Wingate, G. Matteucci, L. Aragao, M. Aubinet, C. Beer, C. Bernhofer, K.G. Black, D. Bonal, J.M. Bonnefond, J. Chambers, P. Ciais, B. Cook, K.J. Davis, A.J. Dolman, B. Gielen, M. Goulden, J. Grace, A. Granier, A. Grelle, T. Griffis, T. Grunwald, G. Guidolotti, P.J. Hanson, R. Harding, D.Y. Hollinger, L.R. Hutyyra, P. Kolari, B. Kruijt, W. Kutsch, F. Lagergren, T. Laurila, B. E. Law, G. Le Maire, A. Lindroth, D. Loustau, Y. Malhi, J. Mateus, M. Migliavacca, L. Misson, L. Montagnani, J. Moncrieff, E. Moors, J.W. Munger, E. Nikinmaa, S. V. Ollinger, G. Pita, C. Rebmann, O. Roupsard, N. Saigusa, M. J. Sanz, G. Seufert, C. Sierra, M.-L. Smith, **J. Tang**, R. Valentini, T. Vesala, and I. A. Janssens, 2007. CO₂ balance of boreal, temperate, and tropical forests derived from a global database. *Global Change Biology*, 13, 2509-2537.
- Tang, J.**, P.V. Bolstad, B.E. Ewers, A.R. Desai, K.J. Davis, E.V. Carey, 2006. Sap-flux-upscaled canopy transpiration, stomatal conductance and water use efficiency in an old-growth forest in the Great Lakes region of United States. *Journal of Geophysical Research-Biogeosciences*, 111, G02009, doi:10.1029/2005JG000083.
- Baldocchi, D.D., **J. Tang**, L. Xu, 2006. How lags, pulses and switches in biophysical regulators affect spatio-temporal variation of soil respiration in an oak-grass savanna, *Journal of Geophysical Research – Biogeosciences*, 111, G02008, doi:10.1029/2005JG000063.
- Misson, L., A. Gershenson, **J. Tang**, R. Boniello, M. McKay, W. Cheng, A. Goldstein, 2006. Influence of canopy photosynthesis and rain pulses on root dynamics and soil respiration in a young ponderosa pine forest. *Tree Physiology*, 26, 833-844.
- Tang, J.**, D.D. Baldocchi, L. Xu, 2005. Tree photosynthesis modulates soil respiration on a diurnal time scale. *Global Change Biology*, 11, 1298-1304.
- Tang, J.**, L. Misson, A. Gershenson, W. Cheng, A. Goldstein, 2005. Continuous measurements of soil respiration with and without roots in a ponderosa pine plantation in the Sierra Nevada Mountains. *Agricultural and Forest Meteorology*, 132, 212-227.
- Tang, J.**, D.D. Baldocchi, 2005. Spatial-temporal variation of soil respiration in an oak-grass savanna ecosystem in California and its partitioning into autotrophic and heterotrophic components. *Biogeochemistry*, 73, 183-207.
- Tang, J.**, Y. Qi, M. Xu, L. Misson, A. Goldstein, 2005. Forest thinning and soil respiration in a ponderosa pine plantation in the Sierra Nevada. *Tree Physiology*, 25, 57-66.

- Misson, L., **J. Tang**, M. Xu, M. McKay, A. Goldstein, 2005. Influences of recovery from clear-cut, climate variability, and thinning on the carbon and energy balance of a young ponderosa pine plantation. *Agricultural and Forest Meteorology*, 130, 207-222.
- Xu, L., D.D. Baldocchi, **J. Tang**, 2004. How soil moisture, rain pulses and growth alter the response of ecosystem respiration to temperature. *Global Biogeochemical Cycles*, 18, GB4002, doi:10.1029/2004GB002281.
- Tang, J.**, D.D. Baldocchi, Y. Qi, L. Xu, 2003. Assessing soil CO₂ efflux using continuous measurements of CO₂ within the soil profile with small solid-state sensors. *Agricultural and Forest Meteorology*, 118, 207-220.

Book chapters

- Tang, J.** 2009. Ecosystem photosynthesis and respiration: Key processes in global carbon cycles, in: *Modern Ecological Lectures (IV)* (Wu & Yang Eds), Chapter 5, 102-119. China Higher Education Press, Beijing (in Chinese)
- Tang, J.**, 2001. Theories in environmental planning, Chapter 2 in: *Environmental Planning* (Guo H. et al Eds.), China Higher Education Press. Beijing. 301 p. (in Chinese)
- Tang, J.**, 2000. Economics in environmental management, Chapter 13 in: *Environmental Protection and Sustainable Development* (Qian, Y. and X. Tang Eds.), China Higher Education Press, Beijing. 369p. (in Chinese)
- Qi, Y., **J. Tang**, M. Xu, 2000. Modeling the biosphere in climate change studies: respiration and decomposition, in: *Modern Ecological Lectures (II)*, China Science Press. (in Chinese)
- Tang, J.**, 1996. Discussion on price of air resource, In: *China's Environmental Economics: From Theory to Practice*, 68-70, Chinese Agricultural Technology Publication. (in Chinese)
- Tang, J.**, 1995. Measurement of sustainable development, In: *Resource, Environment and Strategy of Sustainable Development*, 603-606, China Envi. Sci. Publication. (in Chinese)
- Tang, J.**, 1993. From environmental impact assessment to the value of environmental quality, In: *Walking Toward 21st Century*, 86-90, China Envi. Sci. Publication. (in Chinese)

CONFERENCE PRESENTATIONS and PROCEEDINGS

- J. Tang**, Soil respiration under snowpack at Harvard Forest in Massachusetts, Presented in the Ecological Society of America annual meeting in Pittsburgh, PA, August 1-6, 2010.
- Hickman J., C. Palm, P.K. Mutuo, **J. Tang**, J.M. Melillo, Impacts of an African Green Revolution on greenhouse gas emissions: Fertilizer-N₂O response functions in a maize agroecosystem in Maseno, Kenya. Presented in the Ecological Society of America annual meeting in Pittsburgh, PA, August 1-6, 2010.
- Melillo, J.M., S.M. Butler, R.M. Smith, C.L. Vario, A. J. Burton, Y. Zhou, **J. Tang**, J.E. Johnson, J. E. Mohan, Effects of soil warming on the carbon cycle at the Harvard Forest, Massachusetts, USA. Presented in the Ecological Society of America annual meeting in Pittsburgh, PA, August 1-6, 2010.
- Moseman-Valtierra, S.M., K.A. Kroeger, R. Gonzalez, **J. Tang**, J. Crusius, J. Bratton, T. Brooks, and A. Green, Is nitrogen loading shifting coastal wetlands from sinks to sources of greenhouse gases? Presented in the Ecological Society of America annual meeting in Pittsburgh, PA, August 1-6, 2010.
- R.M. Smith, Melillo, J.M., S.M. Butler, C.L. Vario, A. J. Burton, Y. Zhou, **J. Tang**, J.E. Johnson, J. E. Mohan, Effects of soil warming on the carbon cycle at the Harvard Forest,

- Massachusetts, USA. Presented in the Annual Harvard Forest Ecology Symposium, March 16, 2010.
- K. Morkeski and **J. Tang**, Forest phenology, soil warming, and climate feedbacks. Poster presented for K-12 teachers in Woods Hole Science and Technology Education Partnership (WHSTEP)'s Liaison meeting, October 14, 2009.
- Zhou Y.M., **J. Tang**, J. Melillo, S. Butler, J. Mohan, Root standing crop and chemistry after six years of soil warming in a temperate forest. Presented in the Annual Harvard Forest Ecology Symposium, March 17, 2009.
- Tang, J.**, Age-driven decline in plant productivity and respiration, presented in the Ecological Society of America annual meeting in Milwaukee, WI, August 4-8, 2008.
- Tang, J.**, Automated measurements of CO₂ profiles and fluxes, presented (invited) in the Workshop on Automated Soil Respiration Measurements, Durham, NH, Sep. 10-12, 2007.
- Tang, J.**, Carbon sequestration during prairie restoration, presented in the Ecological Society of America annual meeting in San Jose, CA, August 5-10, 2007.
- Tang, J.**, Successional patterns of carbon cycles in eastern deciduous forests of the U.S., Presented in the 2007 EcoSummit meeting, Beijing, China, May 22-27, 2007.
- Tang, J.**, P.V. Bolstad. Chronosequence of soil carbon fluxes and stocks during forest development after harvest in the Great Lakes Areas. Presented in Soils and Restoration Ecology Conference at DePaul University, Chicago, IL, Dec. 18-20, 2006.
- Tang, J.**, P. V. Bolstad, B. D. Cook, P. Weishampel. Ecosystem carbon stocks, respiration, GPP, NPP and NEP in a wetland in northern Wisconsin. Invited speech for the American Geophysical Union (AGU) Fall Meeting in San Francisco, CA, Dec. 11-15, 2006.
- Tang, J.**, Chronosequence of soil and ecosystem respiration in the deciduous forests in the Great Lakes region of the United States. Presented in the Chequamegon Ecosystem-Atmosphere Study (ChEAS) 2006 Meeting in Woodruff, WI, June 6, 2006.
- Tang, J.**, P.V. Bolstad, J.G. Martin. Decline in soil respiration with age in a chronosequence study of deciduous forests. Poster presented in the 1st Integrated Land Ecosystem-Atmosphere Processes (iLEAPS) Science Conference, Boulder, CO, Jan. 21-26, 2006.
- Tang, J.**, P.V. Bolstad. Simulating soil carbon dynamics in northern hardwood forests using the Century Model. Presented in a Workshop on Soil Carbon Dynamics in Northern U.S. Forests, sponsored by U.S. Forest Service Northern Global Change Research Program. Minneapolis, MN, Jan. 17-18, 2006.
- Tang, J.**, P.V. Bolstad, J.G. Martin. Soil respiration in a chronosequence of deciduous forests in the Great Lakes region of the United States. Presented in the American Geophysical Union (AGU) Fall Meeting in San Francisco, CA, Dec. 5-9, 2005.
- Tang, J.**, P.V. Bolstad, Carbon allocation in an old-growth forest in the Great Lakes region of the United States. Poster presented in the Seventh International Carbon Dioxide Conference, Boulder, CO, September 25-30, 2005.
- Tang, J.**, Ecosystem component respiration, carbon allocation and canopy transpiration in an old-growth forest. Presented in the Chequamegon Ecosystem-Atmosphere Study (ChEAS) 2005 Meeting in Woodruff, WI, June 1, 2005.
- Liang, N., T. Hirano, **J. Tang**, J. Irvine, A. Black. New sensors for soil respiration. Presented in the Global FLUXNET 2004 Workshop in Firenze, Italy, Dec. 14, 2004.

- Tang, J.**, P.V. Bolstad, A.R. Desai, J.G. Martin, K.J. Davis. Forest succession and respiration. Poster presented in the American Geophysical Union (AGU) Fall Meeting in San Francisco, CA, Dec. 2004.
- Tang, J.**, P.V. Bolstad, A.R. Desai, J.G. Martin, K.J. Davis. Ecosystem respiration in an old-growth and a mature northern forest. Poster presented at the AmeriFlux Annual Meeting at Boulder, Colorado, Oct. 2004.
- Misson L., A. Gershenson, **J. Tang**, M. McKay, W. Cheng, A. Goldstein. Controls of canopy photosynthesis on roots and soil carbon dynamics in a young ponderosa pine plantation. Poster presented at the AmeriFlux Annual Meeting at Boulder, Colorado, Oct. 2004.
- Baldocchi, D.D., **J. Tang**, L. Xu, Evaluating autotrophic and heterotrophic respiration in an oak grass savanna using flux-gradient measurements of soil respiration with new infra-red CO₂ sensors. Presented in the American Meteorological Society 26th Conference in Vancouver, BC, Canada, August 24, 2004.
- Tang, J.**, D.D. Baldocchi, A. Goldstein, and L. Xu. Pulse effects of soil respiration after rain events in California. Presented in the American Geophysical Union (AGU) Fall Meeting in San Francisco, CA, Dec. 12, 2003.
- Tang, J.**, D.D. Baldocchi. Spatial variation and partitioning of soil respiration in an oak-grass savanna ecosystem in California. Poster presented at the AmeriFlux Annual Meeting and NIGEC Soils Workshop at Boulder, Colorado, Oct. 13-16, 2003.
- Tang, J.**, D.D. Baldocchi. Spatial variation and partitioning of soil respiration in an oak-grass savanna ecosystem in California. Poster presented for the Kearney Foundation of Soil Science, Soil Carbon Sequestration Workshop: The Interface Between Science and Policy, University of California, Davis, September 22-23, 2003.
- Tang, J.**, Y. Qi, A. Goldstein. Separating root respiration from soil respiration in a ponderosa pine plantation in the Sierra Nevada. Poster presented for the Kearney Foundation of Soil Science, Soil Carbon Sequestration Workshop: The Interface Between Science and Policy, University of California, Davis, September 22-23, 2003.
- Tang, J.**, Y. Qi, A. Goldstein. Separating root respiration from soil respiration in a ponderosa pine plantation in the Sierra Nevada. Presented in the 88th Ecological Society of America Annual Meeting in Savannah, Georgia, August 3-8, 2003.
- Tang, J.**, Separating root respiration from soil CO₂ efflux in a ponderosa pine plantation in the Sierra Nevada, California. Presented in the Annual Blodgett Symposium in the Blodgett Forest Station, California, February 2003.
- Tang, J.**, L. Wang, Y. Qi, P. Gong, M. Xu. Modeling ecosystem respiration in a ponderosa pine plantation in the Sierra Nevada Mountains, California: integrating high resolution remote sensing, chamber measurement of flux, and forest inventory. Presented in the 2002 CPGIS (the Association of Chinese Professionals in Geographic Information Systems) Annual Conference in Nanjing, June 1, 2002.
- Tang, J.**, Y. Qi, M. Xu. Comparison of soil respiration before and after thinning in a Sierra Nevada forest. Presented in the Annual Blodgett Symposium in the Blodgett Forest Station, California on January 25, 2002.
- Tang, J.**, Y. Qi, M. Xu. Comparison of soil respiration before and after thinning in a Sierra Nevada forest. Presented in the American Geophysical Union (AGU) 2001 Fall Meeting in San Francisco, CA, Dec. 2001.

Tang, J., M. Xu, Y. Qi. The impact of forest thinning on soil respiration. Presented in the 16th Annual Symposium of the US Regional Chapter of the International Association of Landscape Ecology at Arizona State University, April 25-29, 2001.

Tang, J., M. Henderson, Y. Qi. Digitalized natural vegetation of California. Map presented in ESRI User Conference in San Diego in 2000.

INVITED SEMINARS

Tang, J. Ecosystem Carbon Cycling, guest lecture for Boston College BI 486, invited by Serena Moseman, Oct. 20, 2009.

Tang, J., Soil respiration: Components, controls, succession, and acclimation, invited lecture for Graduate University of Chinese Academy of Sciences, July 3, 2009.

Tang, J., Soil respiration: Components, controls, succession, and acclimation, invited lecture for the 5th International Symposium on Modern Ecology in Lanzhou, China, June 26-28, 2009.

Tang, J., Soil respiration: Components, controls, succession, and acclimation, Department Seminar, Department of Earth and Planetary Sciences, The Johns Hopkins University, May 7, 2009.

Tang, J., Ecosystem carbon cycles in response to climate change: Controls, succession, and acclimation. Invited seminar for the Toolik Station of the Arctic LTER site in Northern Alaska, July 22, 2008.

Tang, J., Terrestrial ecosystem measurement and modeling: State and flow. Invited for the State Key Laboratory of Remote Sensing, Chinese Academy of Science, Beijing, July 2, 2008.

Tang, J., Ecosystem photosynthesis and respiration: Key processes in global carbon cycling. Invited for International Institute of Earth System Science, Nanjing University, June 26, 2008.

Tang, J., Age-driven decline of forest productivity and respiration: An ecological paradigm of succession revisited. Ecosystems Center Seminar, Marine Biological Laboratory, Woods Hole, MA. April 15, 2008.

Tang, J., Automated measurement of CO₂ profiles and fluxes in soils. Invited by Katalin Szlavecz Lab, The Johns Hopkins University, March 11, 2008.

Tang, J., Ecosystem respiration and photosynthesis: Controls, coupling, and succession. Invited for Environmental Change Initiative, Brown University, Feb. 13, 2008.

Tang, J., Ecosystem respiration and photosynthesis: Controls, coupling, and succession. Invited lecture for Department of Ecology, Peking University, Beijing, China. Dec. 11, 2007.

Tang, J., Ecosystem respiration and photosynthesis: Controls, coupling, and succession. Invited lecture for Institute of Botany, The Chinese Academy of Sciences, Beijing, China. Dec. 10, 2007.

Tang, J., Plant photosynthesis and respiration: key processes in global carbon cycling, invited lecture for Institute of Natural Resources, National Dong Hwa University, Taiwan, Sep. 5, 2007.

Tang, J., Plant photosynthesis and respiration: Controls, coupling, and succession, invited lecture for the Ecosystems Center at the Marine Biological Laboratory, Woods Hole, MA, July 19, 2007.

Tang, J., Plant photosynthesis and respiration: key processes in global carbon cycling, invited lecture for the 4th International Symposium on Modern Ecology, Inner Mongolia University, China, May 29 – June 3, 2007.

- Tang, J.**, Ecosystem carbon cycle: from interactions of soil-root to leaf-atmosphere, invited lecture for College of Resources and Environmental Sciences, Chinese Agricultural University, Beijing, June 1, 2007.
- Tang, J.**, Plant photosynthesis and respiration: key processes in global carbon cycling, invited lecture for the 4th USCCC (United States China Carbon Consortium) annual workshop, Beijing, China, May 28, 2007.
- Tang, J.**, Plant photosynthesis and respiration: key processes in global carbon cycling, invited lecture for Institute of Remote Sensing Applications, Chinese Academy of Sciences, Beijing, May 22, 2007
- Tang, J.**, Controls, coupling, and succession of ecosystem respiration and photosynthesis, invited Departmental Seminar for Department of Environmental Sciences, University of Toledo, OH, March 30, 2007.
- Tang, J.**, CO₂ emissions from the soil: Components, controls and succession, invited lecture for Chicago Botanic Garden, Chicago, IL, May 31, 2006.
- Tang, J.**, Ecosystem respiration, photosynthesis, and transpiration: Controls, coupling, and succession, invited lecture for Prof. Hsieh's group in Institute of Ecology and Evolutionary Biology, National Taiwan University, Taiwan, May 26, 2006.
- Tang, J.**, Measurement and modeling of carbon and water fluxes: respiration, photosynthesis, and transpiration, invited lecture for Department of Geography, University of Idaho, March 21, 2006.
- Tang, J.**, Ecosystem respiration, photosynthesis, and transpiration: Controls, coupling, and succession, invited lecture for Department of Biological Sciences, University of Illinois at Chicago, March 7, 2006.
- Tang, J.**, Soil respiration: components, controls and succession, invited lecture for Departmental Seminar, Dept. of Soil, Water, and Climate at University of Minnesota, Feb. 13, 2006.
- Tang, J.**, Ecosystem respiration: components, controls and succession. Invited lecture at USGS EROS Data Center, Sioux Falls, SD, Jan.14, 2005.
- Tang, J.**, Ecosystem respiration, its controls and succession. Presented for Prof. Peter Reich's group at University of Minnesota, Nov. 9, 2004.
- Tang, J.**, Carbon cycles and soil respiration. Presented in the Center for Assessment and Monitoring of Forests and Environmental Resources, UC Berkeley. April 16, 2004.
- Tang, J.**, Spatial and temporal variation of soil respiration. Invited lecture for Prof. Steven Wofsy's group at Harvard University, Dec. 4, 2003.
- Tang, J.**, Spatial and temporal variation and driving factors of soil respiration in forest and savanna ecosystems in California. Presented in the Departmental Symposium, Dept. of Environmental Science, Policy and Management, UC Berkeley, Dec. 1, 2003.
- Tang, J.**, Measurement and modeling of soil respiration in forest and savanna ecosystems of the Sierra Nevada: temporal and spatial patterns and human impact. Presented for ESPM Ph.D. symposium at UC Berkeley, April 24, 2003.
- Tang, J.**, Global climate change and China's strategies: bridging science and policy. Presented for Berkeley China Review at UC Berkeley, April 11, 2003.

RESEARCH GRANTS

- 2010-2013 PI, Unraveling mechanisms controlling responses of soil respiration to warming, NSF, \$961,327 (J. Tang, J. Melillo, L. Amaral-Zettler)--Pending

- 2010-2013 Co-PI, Modeling the production and transport of dissolved organic carbon (DOC) from upland ecosystems through watersheds to the coast in response to climate change, NASA, \$471,186 (subcontract to J. Tang)--Pending
- 2010-2011 PI, EAGER: Differentiating heterotrophic and root respiration through concurrent measurement of CO₂ and O₂ fluxes in soils, NSF, \$149,211.
- 2010 PI, Effects of lengthening growing season and increasing temperature on soil carbon fluxes and stocks in Arctic tundra, NSF, \$99,879.
- 2010-2012 Co-PI, MRI-R2: Acquisition of Trace Gas and Aerosol Instrumentation for Ecosystem Analysis, NSF, \$418,048 (H. Ducklow, J. Tang, M. Conte, C. Neill).
- 2010-2011 PI, Working group in phenology, the carbon cycle and climate change, seed fund from the Environmental Change Initiative at Brown University, \$5,000 (J. Tang, J. Schmitt)
- 2009-2010 PI, Working group in phenology and climate change, seed fund from the Environmental Change Initiative at Brown University, \$4,000 (J. Tang, J. Schmitt)
- 2006-2007 Postdoc PI, Canopy transpiration, stomatal conductance and wind effects in a tropical forest in Taiwan, funded by Center for Tropical Forest Science of the Smithsonian Tropical Research Institute (\$12,000).
- 2002-2003 Graduate student PI, Measurement and modeling of ecosystem respiration in a Monterey pine plantation at East San Francisco Bay, funded by the Monterey Pine Forest Ecology Cooperative from David and Lucile Packard Foundation (\$4,000).

MANUSCRIPT AND PROPOSAL REVIEWS

Manuscript review for *Global Change Biology*, *Agricultural and Forest Meteorology*, *Global Biogeochemical Cycles*, *Journal of Geophysical Research*, *Journal of Plant Ecology*, *Environmental Management*, *Tellus B*, *Biogeochemistry*, *New Phytologist*, *Plant and Soil*, *Functional Ecology*, *Geophysical Research Letters*, *Tree Physiology*, *Science of the Total Environment*, *Journal of Integrative Plant Biology*, *Pedosphere*, *Forest Ecology and Management*, *Plant Ecology*, *Hydrological Sciences Journal*, *Physiologia Plantarum*, *Journal of Biosciences*, *Chinese Science Bulletin*

Proposal Review for National Science Foundation (NSF), DOE/National Institute for Global Environmental Change.

SYNERGISTIC ACTIVITIES

- 2010 Organizer and presider for the Organized Oral Session: Long-term warming experiment: what we have learned and what is unknown, Ecological Society of America (ESA) meeting, August 1-6, 2010, Pittsburgh, PA.
- 2009 Organizer and presider for the Organized Oral Session: Roles of Ecological Science in Combating Global Change and Natural Disasters and Working Toward Sustainability of a Global Society: Lessons from China, Ecological Society of America (ESA) meeting, August 2-7, 2009, Albuquerque, NM.
- 2009 Organizer for the First International Young Ecologist Forum, June 29, 2010, Lanzhou, China
- 2008 Presider, Ecosystem Function: NPP, for the Ecological Society of America (ESA) meeting, August 4-8, 2008.

- 2007 Presider, Climate Change: Effects on ecosystem function and biogeochemistry, for the Ecological Society of America (ESA) meeting, August 6-10, 2007.
- 2007 Convener, Recent Advances in Soil Ecology and Soil Carbon Dynamics, for EcoSummit 2007, May 22-27, 2007.
- 2006 Convener, Cross-scale studies on carbon cycles: from biometric measurements, eddy covariance, to remote sensing, for West Pacific Geophysical Meeting, Beijing, China. July 24-27, 2006.

GRADUATE STUDENTS AND POSTDOCS

- Xi Yang, Ph.D. student, Brown University, 9/2009-present (Co-advised with John Mustard at Brown University)
- Duane Ambroz, master student, Northwester University, 7/2007-present
- Wei-Chun Chao, Visiting postdoc from National Taiwan University, 5/2009-8/2009
- Rachel Gross, master student, Northwester University, 9/2006-5/2007 (in committee)
- Rosemary Bush, master student, Northwester University, 9/2007-8/2008 (in committee)

OTHER STUDENTS AND VISITING SCHOLARS

- Danielle Pinaud, Mashpee High School, science project on soil respiration, 2/2010-present
- Vincent Lin, Falmouth High School, science project on litter decomposition, 12/2009-2/2010 (2010 Falmouth Public Schools Science Fair 1st Place Award and MA Regional Science Fair 2nd place award)
- Haruka Fujimaki & Ayala Ben-Chaim, MBL SES students, 9/2009-12/2009.
- James Shelton, summer intern of PEP (*underrepresented*) from Arkansas State University, 7-8/2009
- Paliza Shrestha, MBL SES student (*International*), 9/2008-12/2008
- Yumei Zhou, MBL Visiting Scholar from Institute of Applied Ecology, Chinese Academy of Science, China, 5/2008-5/2009
- Lin Wang, MBL visiting graduate student from Institute of Remote Sensing, Chinese Academy of Science, China, 5/2008-9/2008.
- György Kurucz, University of Minnesota, Exchange student from Hungary, 5/2006-9/2006
- Tiffany Harris, high school student (*underrepresented, female*) enrolled in College First, organized by Chicago Botanic Garden, summer 2007.

PROFESSIONAL MEMBERSHIPS

American Geophysical Union (AGU)
Ecological Society of America (ESA)
Sino-Ecologists Association Overseas (Sino-Eco)
International Association of Chinese Professionals in Geographic Information Science (CPGIS)

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