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EDUCATION

8/1999-5/2003	University of California, Berkeley	Ph.D. in Ecosystem Sciences
9/1992-7/1995	Peking (Beijing) University, China	M.S. in Environmental Sciences
9/1988-7/1992	Peking (Beijing) University, China	B.S. in Geology

PROFESSIONAL EXPERIENCE

1/2008-	Assistant scientist at the Ecosystems Center, MBL (Marine Biological Laboratory)
1/2008-	Assistant professor at Brown University
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
1995-1999	National Consultant for the World Bank, UNDP and UNIDO, Project: Phaseout of Ozone Depleting Substances in China
1996-1997	Domestic Consultant for the Asia Development Bank, Project: Pilot Environmental Plans for Selected Medium-sized Cities in China

TEACHING EXPERIENCE

9/2007-12/2007	Ecosystem Ecology (PBC 405), Northwestern University
3/2007-5/2007	Soil Ecology (PBC 440), Northwestern University (co-instructor)
1/2006-5/2006	Biosphere-Atmosphere Interactions (FR 5480), University of Minnesota
7/1995-6/1999	Environmental Planning and Management, Peking University, China.

PUBLICATIONS

In peer-reviewed journals

- [17] **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.
- [16] 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.
- [15] 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.
- [14] Luysaert 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.
- [13] **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.
- [12] 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.
- [11] 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.
- [10] **Tang, J.**, D.D. Baldocchi, L. Xu, 2005. Tree photosynthesis modulates soil respiration on a diurnal time scale. *Global Change Biology*, 11, 1298-1304.
- [9] **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.

- [8] **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.
- [7] **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.
- [6] 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.
- [5] 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.
- [4] **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.
- [3] **Tang, J.**, W. Ye, 1998. Studies on environmental carrying capacity and its quantification, *Chinese Environmental Science*, 227-230, Vol.18, No.3. (in Chinese)
- [2] **Tang, J.**, W. Ye, H. Guo, 1997. Environmental carrying capacity and its application on environmental planning, *Chinese Environmental Science*, 6-9, Vol.17, No.1. (in Chinese)
- [1] Guo, H., **J. Tang**, 1995. A strategy for sustainable development for urban water environment and socio-economy, *Acta Scientiae Circumstantiae*, 363-369, Vol.15, No.3. (in Chinese)

Book chapters

- [7] **Tang, J.** 2008. Ecosystem photosynthesis and respiration: Key processes in global carbon cycles, in: *Modern Ecological Lectures (IV)* (Wu et al. Eds), China Higher Education Press, Beijing (in press, in Chinese)
- [6] **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)
- [5] **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)
- [4] 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)
- [3] **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)

- [2] **Tang, J.**, 1995. Measurement of sustainable development, In: *Resource, Environment and Strategy of Sustainable Development*, 603-606, China Envi. Sci. Publication. (in Chinese)
- [1] **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

- [27] **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.
- [26] **Tang, J.**, Carbon sequestration during prairie restoration, presented in the **Ecological Society of America** annual meeting in San Jose, CA, August 5-10, 2007.
- [25] **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.
- [24] **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.
- [23] **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.
- [22] **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.
- [21] **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.
- [20] **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.
- [19] **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.
- [18] **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.

- [17] **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.
- [16] 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.
- [15] **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.
- [14] **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.
- [13] 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.
- [12] 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 infrared CO₂ sensors. Presented in the **American Meteorological Society 26th Conference** in Vancouver, BC, Canada, August 24, 2004.
- [11] **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.
- [10] **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.
- [9] **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.
- [8] **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.
- [7] **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.
- [6] **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.
- [5] **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.
- [4] **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.
- [3] **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.
- [2] **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.
- [1] **Tang, J.**, M. Henderson, Y. Qi. Digitalized natural vegetation of California. Map presented in **ESRI User Conference** in San Diego in 2000.

INVITED SEMINARS

- [19] **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.
- [18] **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.
- [17] **Tang, J.**, Plant photosynthesis and respiration: key processes in global carbon cycling, invited lecture for the 4th International Symposium for Modern Ecology, **Inner Mongolia University**, China, May 29 – June 3, 2007.
- [16] **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.
- [15] **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.
- [14] **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
- [13] **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.
- [12] **Tang, J.**, CO₂ emissions from the soil: Components, controls and succession, invited lecture for **Chicago Botanic Garden**, Chicago, IL, May 31, 2006.

- [11] **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.
- [10] **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.
- [9] **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.
- [8] **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.
- [7] **Tang, J.**, Ecosystem respiration: components, controls and succession. Invited lecture at **USGS EROS Data Center**, Sioux Falls, SD, Jan.14, 2005.
- [6] **Tang, J.**, Ecosystem respiration, its controls and succession. Presented for Prof. Peter Reich's group at **University of Minnesota**, Nov. 9, 2004.
- [5] **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.
- [4] **Tang, J.**, Spatial and temporal variation of soil respiration. Invited lecture for Prof. Steven Wofsy's group at **Harvard University**, Dec. 4, 2003.
- [3] **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.
- [2] **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.
- [1] **Tang, J.**, Global climate change and China's strategies: bridging science and policy. Presented for Berkeley China Review at **UC Berkeley**, April 11, 2003.

MANUSCRIPT AND PROPOSAL REVIEWS

- 2008 Manuscript reviewer for *New Phytologist*, *Plant and Soil*, *Journal of Integrative Plant Biology*
- 2007 Manuscript reviewer for *Functional Ecology*, *Geophysical Research Letters*, *Agricultural and Forest Meteorology* (2), *Tree Physiology*, *Global Change Biology* (5), *Journal of Geophysical Research – Biogeosciences*, *Pedosphere*
- 2007 Proposal Reviewer for National Science Foundation (NSF) (2), Partnerships for International Research and Education Program, and Ecosystem Studies Program
- 2006 Manuscript reviewer for *Global Change Biology* (3), *Agricultural and Forest Meteorology* (2), *Tellus B*, *Journal of Geophysical Research – Biogeosciences*,

- Tree Physiology, Forest Ecology and Management, Plant Ecology, Hydrological Sciences Journal, Journal of Zhejiang University Science (2)*
- 2006 Proposal Reviewer for National Science Foundation/Ecosystem Studies Program
- 2005 Manuscript reviewer for *Physiologia Plantarum, Journal of Geophysical Research – Atmospheres, Journal of Biosciences, Agricultural and Forest Meteorology*
- 2004 Manuscript reviewer for *Journal of Zhejiang University Science*
- 2003 Manuscript reviewer for *Agricultural and Forest Meteorology, Tree Physiology*
- 2003 Proposal reviewer for DOE/National Institute for Global Environmental Change
- 2001 Manuscript reviewer for *Chinese Science Bulletin*

SYNERGISTIC ACTIVITIES

- 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

STUDENT ADVISEES

- 10/2007-present Steve Hanson, Master student at Northwestern University (major advisor)
- 10/2006-present Duane Ambroz, Master student at Northwestern University (major advisor)
- 10/2006-present Rachel Gross, Master student at Northwestern University (on committee)
- 10/2006-present Rosemary Bush, Master student at Northwestern University (on committee)

PROFESSIONAL MEMBERSHIPS

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