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KAM-BIU LIU

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EDUCATION:

University of Toronto	Ph.D.	1982	Geography
University of Toronto	M.Sc.	1978	Geography
Chinese University of Hong Kong	B.S.Sc.	1974	Geography (with First Class Honor)

ACADEMIC POSITIONS HELD:

2006-present	George William Barineau III Professor, Department of Oceanography and Coastal Sciences, School of the Coast and Environment, Louisiana State University (LSU)
1997-06	James J. Parsons Professor of Geography, Dept. Geography & Anthropology, LSU
1995-97	Professor, Department of Geography & Anthropology, Louisiana State University
1989-95	Associate Professor, Dept. of Geography & Anthropology, Louisiana State University
1991	Visiting Senior Lecturer, Department of Geography and Geology, University of Hong Kong (Fall semester, Sabbatical leave from LSU)
1984-89	Assistant Professor, Dept. of Geography and Anthropology, Louisiana State University
1982-84	Post-doctoral Research Associate, Department of Zoology and Institute of Polar Studies, Ohio State University
1974-76	Tutor, Department of Geography, Chinese University of Hong Kong

RESEARCH INTERESTS

Thematic: Paleotempestology, Coastal paleoecology, Ice-core paleoclimatology, Global environmental change, Palynology, Lake sediments

Regional: U.S. Gulf coast and Atlantic coast, Caribbean region and Central America, South America (Andes and Amazon Basin), Tibetan Plateau, Central Asia (Mongolia and Kazakhstan), China, Africa

MAJOR NATIONAL SERVICE AND HONOR:

2008-	Elected AAAS Fellow
2002-04	Panel member, NSF Doctoral Dissertation Research Improvement (DDRI) Panel, Geography & Regional Science Program, National Science Foundation
1988-96	Member, U.S. National Committee for the International Union for Quaternary Research (<i>USNC/INQUA</i>)--appointed by the National Academy of Sciences for two consecutive 4-year terms.

PUBLICATIONS

A. Books

- Murnane, R. and Liu, K.B. (eds.), 2004. Hurricanes and Typhoons: Past, Present, and Future. Columbia University Press, New York, 462 pages.
- Ward, J. V. and Liu, K. B. (eds.), 1988. Quaternary Palynology of Tropical Areas, Special issue of Review of Palaeobotany and Palynology, Vol. 55, Nos. 1-3. Elsevier, Amsterdam, 271 pages.

B. Refereed Journal Articles and Book Chapters

(1) Articles published (total = 96)

- Liu, K.B., Lu, H.Y., and Shen, C.M., 2009. "Some fundamental misconceptions about paleotempestology", Quaternary Research 71: 253-254.
- Kiage, L.M., and Liu, K.B., 2009. "Palynological evidence of climate change and land degradation in the Lake Baringo area, Kenya, East Africa, since AD 1650", Palaeogeography, Palaeoclimatology, Palaeoecology 279: 60-72.
- Lu, H.Y., Zhang, J.P., Liu, K.B., Wu, N.Q., et al., 2009. "Earliest domestication of common millet (*Panicum miliaceum*) in East Asia extended to 10,000 years ago", Proceedings of the National Academy of Sciences (PNAS) 106(18): 7367-7372.
- Lu, H.Y., Zhang, J.P., Wu, N.Q., Liu, K.B., Xu, D.K., and Li, Q., 2009. "Phytolith analysis for the discrimination of Foxtail millet (*Setaria italica*) and Common millet (*Panicum miliaceum*)", PLoS ONE 4(2): e4448. doi:10.1371/journal.pone.0004448
- Bianchette, T.A., Liu, K.B., Lam, N.S.-N., and Kiage, L.M., 2009. "Ecological Impacts of Hurricane Ivan on the Gulf Coast of Alabama: A Remote Sensing Study", Journal of Coastal Research, SI 56: 1622-1526.
- Lam, N.S.-N., Arenas, H., Li, Z., and Liu, K.B., 2009. "An estimate of population impacted by climate change along the U. S. coast", Journal of Coastal Research, SI 56: 1522-1526.
- Liu, K.B., Lu, H.Y., and Shen, C.M., 2008. "A 1,200-year proxy record of hurricanes and fires from the Gulf of Mexico coast: Testing the hypothesis of hurricane-fire interactions", Quaternary Research 69: 29-41.
- Liu, K.B. and Fan, D.D., 2008. "Will global warming lead to enhanced tropical cyclone activity? Advances in paleotempestology and their implications", Chinese Science Bulletin 53: 1489-1502.
- Reese, C.A., Strange, T.P., Lynch, W.D., and Liu, K.B., 2008. "Geologic evidence of Hurricane Katrina recovered from the Pearl River Marsh, MS/LA", Journal of Coastal Research 24: 1601-1607.
- Shen, C., Liu, K.B., Tang, L., and Overpeck, J.T., 2008. "Numerical analyses of modern and fossil pollen data from the Tibetan Plateau", Annals of the Association of American Geographers 98(4): 755-772.
- Shen, C., Liu, K.B., Morrill, C., Overpeck, J.T., Peng, J., and Tang, L., 2008. "Ecotone shift and major droughts during the mid-late Holocene in the central Tibetan Plateau", Ecology 89: 1079-1088.
- Ma, Y.Z., Liu, K.B., Feng, Z.D., Sang, Y.L., Wang, W., and Sun, A.Z., 2008. "A survey of modern pollen and vegetation along a south-north transect in Mongolia", Journal of Biogeography 35: 1512-1532.
- Elsner, J.B., Jagger, T.H., and Liu, K.B., 2008: Comparison of hurricane return levels using historical and geological records, Journal of Applied Meteorology and Climatology 47: 368-374.
- Rohli, R.V. and Liu, K.B., 2008. "Citation of research in journals of interest to applied geographers", Applied Geography 28: 151-167.
- Liu, K.B., 2007. "Uncovering prehistoric hurricane activity", American Scientist 95: 126-133.
- Liu, K.B., 2007. "Paleotempestology". In: Elias, S. (ed.), Encyclopedia of Quaternary Science. Elsevier, Amsterdam, pp. 1978-1986.
- Liu, K.B., Reese, C.A., and Thompson, L.G., 2007. "A potential pollen proxy for ENSO derived from the

- Sajama ice core”, Geophysical Research Letters 34, L09504, doi:10.1029/2006GL029018
- Kiage, L.M., Liu, K.B., Walker, N., Lam, N.S.N., Huh, O., 2007. “Recent land-cover/use change associated with land degradation in the Lake Baringo catchment, Kenya, East Africa: evidence from Landsat TM and ETM+”, International Journal of Remote Sensing, 1-25, doi: 10.1080/01431160701241753
- Tornqvist, T.E., Paola, C., Parker, G., Liu, K.B., Mohrig, D., Holbrook, J.M., and Twilley, R.R., 2007, “Comment on ‘Wetland Sedimentation from Hurricanes Katrina and Rita’”, Science 316: 201. (Full text at www.sciencemag.org/cgi/content/full/316/5822/201b)
- Cheung, K.F., Tang, L.J., Donnelly, J.P., Scileppi, E.M., Liu, K.B., Mao, X.Z., Houston, S.H., and Murnane, R.J., 2007. “Numerical modeling and field evidence of coastal overwash in southern New England from Hurricane Bob and implications for paleotempestology”, Journal of Geophysical Research 112, F03024, doi: 10.1029/2006JF000612
- Frappier, A., Knutson, T., Liu, K.B., and Emanuel, K., 2007. “Perspective: coordinating paleoclimate research on tropical cyclones with hurricane-climate theory and modelling”, Tellus A, doi: 10.1111/j.1600-0870.2007.00250.x
- Xu, G.D., Fan, D.D., and Liu, K.B., 2007. “Advances in the study of paleotempestology”, Advances in Earth Sciences 22: 1274-1280.
- Brklacich, M., Brown, I.F., Campos, E.J.D., Krusche, A., Lavell, A., Liu, K.B., Jimenez-Osornio, J., Reyes-Knoche, S., Wood, C., 2007. “Stakeholders and global environmental change science”, In: Tiessen, H., Brklacich, M., Breulmann, G., and Menezes, R.S.C. (eds.), Communicating Global Change Science to Society: An Assessment and Case Studies. Island Press, Washington, D.C., pp. 21-34.
- Lu, H.-Y., Wu, N.-Q., Liu, K.B., Jiang, H., and Liu, T.-S., 2007. “Phytoliths as quantitative indicators for the reconstruction of past environmental conditions in China II: palaeoenvironmental reconstruction in the Loess Plateau”, Quaternary Science Reviews 26: 759-772.
- Liu, K.B. y Colinvaux, P.A., 2007. “Cambios en los bosques de la Cuenca Amazónica durante el Último Máximo Glacial”, In: Leigh, E.C. Jr., Herre, E.A., Jackson, J.B.C., and Santos-Granero, F. (eds), Ecología y Evolución en los Trópicos. Smithsonian Tropical Research Institute, Panama, pp. 333-336 (Spanish-language translation of 1985 *Nature* paper by Liu and Colinvaux).
- Feng, Z.D., Tang, L.Y., Ma, Y.Z., Zhai, Z.X., Wu, H.N., Li, F., Zou, S.B., Yang, Q.L., Wang, W.G., Derbyshire, E., and Liu, K.B., 2007. “Holocene vegetation variations and associated environmental changes during marine isotope stage 3 in the western part of the Chinese Loess Plateau”, Palaeogeography, Palaeoclimatology, Palaeoecology 246: 278-291.
- Feng, Z.D., Zhai, X.W., Ma, Y.Z., Huang, C.Q., Wang, W.G., Zhang, H.C., Khosbayar, P., Narantsetseg, T., Liu, K.B., and Rutter, N.W., 2007. “Eolian environmental changes in the northern Mongolian Plateau during the past ~35,000 yr”, Palaeogeography, Palaeoclimatology, Palaeoecology 245: 505-517.
- Kiage, L.M. and Liu, K.B., 2006. “Late Quaternary paleoenvironmental changes in East Africa: A review of multi-proxy evidence from palynology, lake sediments, and associated records”, Progress in Physical Geography 30: 633-658.
- Fogarty, E.A., Elsner, J.B., Jagger, T.H., Liu, K.B., and Louie, K.S., 2006. “Variations in typhoon landfalls over China”, Advances in Atmospheric Sciences 23(5): 665-677.
- Morrill, C., Overpeck, J.T., Cole, J.E., Liu, K.B., Shen, C., and Tang, L., 2006. “Holocene variations in the Asian monsoon inferred from the geochemistry of lake sediments in central Tibet”, Quaternary Research 65(2): 232-243.
- Shen, C., Liu, K.B., Tang, L., and Overpeck, J.T., 2006. “Quantitative relationships between modern pollen rain and climate in the Tibetan Plateau”, Review of Palaeobotany and Palynology 140: 61-77.
- Feng, Z.D., Tang, L.Y., Wang, H.B., Ma, Y.Z., and Liu, K.B., 2006. “Holocene vegetation variations and associated environmental changes in the western part of the Chinese Loess Plateau”, Palaeogeography, Palaeoclimatology, Palaeoecology 241: 440-456.
- Lu, H.-Y., Wu, N.-Q., Yang, X.-D., Jiang, H., Liu, K.B., Liu, T.-S., 2006. “Phytoliths as quantitative

- indicators for the reconstruction of past environmental conditions in China I: phytolith-based transfer functions”, Quaternary Science Reviews 25: 945-959.
- Liu, K.B., Reese, C.A., and Thompson, L.G., 2005. “Ice-core pollen record of climatic changes in the central Andes during the last 400 years”, Quaternary Research 64(2): 272-278.
- Lu, H.Y., Yang, X.Y., Ye, M.L., Liu, K.B., Xia, Z.K., Ren, X.Y., and Cai, L.H., Wu, N.Q., and Liu, T.S., 2005. “Millet noodles in Late Neolithic China”, Nature 437: 967-968.
- Lu, H.Y. and Liu, K.B., 2005. “Phytolith assemblages as indicators of coastal environmental changes and hurricane overwash deposition”, The Holocene 15 (7): 965-972.
- Overpeck, J.T., Liu, K.B., Morrill, C. Cole, J., Shen, C., Anderson, D., and Tang, L., 2005. “Holocene environmental change in the Himalayan-Tibetan Plateau region: Lake sediments and the future”. In: U.M. Huber, H.K.M. Bugmann, and M.A. Reasoner (eds.), Global Change and Mountain Regions: An Overview of Current Knowledge. Springer, Boston, pp. 83-92.
- Shen, C.M., Tang, L.Y., Wang, S.M., Li, C.H., and Liu, K.B., 2005. “Pollen records and time scale for the RM core of the Zoige Basin, northeastern Qinghai-Tibetan Plateau”, Chinese Science Bulletin 50(6): 553-562.
- Reese, C.A. and Liu, K.B., 2005. “Interannual variability in pollen dispersal and deposition on the tropical Quelccaya Ice Cap”, Professional Geographer 57(2): 185-197.
- Reese, C.A. and Liu, K.B., 2005. “A modern pollen rain study from the central Andes region of South America”, Journal of Biogeography 32: 709-718.
- Liu, K.B., 2004. “Paleotempestology: Principles, methods, and examples from Gulf coast lake-sediments”. In: Murnane, R. and Liu, K.B. (eds.): Hurricanes and Typhoons: Past, Present, and Future. Columbia University Press, New York, pp. 13-57.
- Louie, K.S. and Liu, K.B., 2004. “Ancient records of typhoons in Chinese historical documents”. In Murnane, R. and Liu, K.B. (eds.): Hurricanes and Typhoons: Past, Present, and Future. Columbia University Press, New York, pp. 222-248.
- Murnane, R. and Liu, K.B., 2004. "Conclusion". In Murnane, R. and Liu, K.B. (eds.): Hurricanes and Typhoons: Past, Present, and Future. Columbia University Press, New York, pp. 441-446.
- Liu, K.B., 2004. “Paleotempestology: Geographic solutions to hurricane hazard assessment and risk prediction”. In: D. Janelle, B. Warf, and K. Hansen (eds.), WorldMinds: Geographical Perspectives on 100 Problems. Kluwer Academic Publishers, Dordrecht, pp. 443-448.
- Elsner, J.B. and Liu, K.B., 2003. “Examining the ENSO-Typhoon hypothesis”, Climate Research 25(1): 43-54.
- Reese, C.A., Liu, K.B., and Mountain, K.R., 2003. “Pollen dispersal and deposition on the ice cap of Volcan Parinacota, southwestern Bolivia”, Arctic, Antarctic, and Alpine Research 35(4): 58-63.
- Liu, K.B., Lu, H.Y., and Shen, C.M., 2003. “Assessing the vulnerability of the Alabama Gulf coast to intense hurricane strikes and forest fires in the light of long-term climatic changes”. In: Ning, Z.H., Turner, R.E., Doyle, T., and Abdollahi, K. (eds), Integrated Assessment of the Climate Change Impacts on the Gulf Coast Region, Gulf Coast Regional Climate Change Council, Baton Rouge, pp. 223-230.
- Lu, H.Y. and Liu, K.B., 2003. “Phytoliths of common grasses in the coastal environments of southeastern USA”. Estuarine, Coastal and Shelf Science 58(3): 587-600.
- Louie, K.S. and Liu, K.B., 2003. “Earliest historical records of typhoons in China”. Journal of Historical Geography 29 (3): 299-316.
- Lu, H.Y. and Liu, K.B., 2003. “Morphological variations of lobate phytoliths from grasses in China and the south-eastern United States”. Diversity and Distributions 9: 73-87.
- Lu, H.Y., Jia, J.W., Wang, W.M., Wang, Y.J., and Liu, K.B., 2002. “On the meaning of phytolith and its classification in Gramineae”. Acta Micropalaeontologica Sinica 19: 389-396.
- Liu, K.B. and Fearn, M.L., 2002. “Lake sediment evidence of coastal geologic evolution and hurricane history from Western Lake, Florida: Reply to Otvos”, Quaternary Research 57: 429-431.
- Liu, K.B., 2002. “Biogeography at LSU”, in: Steinberg, M.K. and Hudson, P.F. (eds.), Cultural and Physical Expositions: Geographic Studies in the Southern United States and Latin America,

- Geoscience and Man* 36, Geoscience Publications, Department of Geography and Anthropology, Louisiana State University, Baton Rouge, pp. 233-259
- Reese, C.A. and Liu, K.B., 2002. "Pollen dispersal and deposition on the Quelccaya Ice Cap", *Physical Geography* 23: 44-58.
- Maxwell, A. and Liu, K.B., 2002. "Late Quaternary pollen and associated records from the monsoonal areas of continental South and SE Asia", in: Kershaw, P., David, B., Tapper, N., Penny, D., and Brown, J. (eds.), *Bridging Wallace's Line: The Environmental and Cultural History and Dynamics of the SE-Asian-Australian Region*, *Advances in GeoEcology* 34, Catena Verlag, Reiskirchen, pp. 189-228.
- Liu, K.B., Shen, C., and Louie, K.S., 2001. "A 1000-year history of typhoon landfalls in Guangdong, southern China, reconstructed from Chinese historical documentary records", *Annals of the Association of American Geographers* 91: 453-464.
- Reese, C.A. and Liu, K.B., 2001. "Late-Holocene vegetation changes at Bluff Swamp, Louisiana", *Southeastern Geographer* 42(1): 20-35.
- (Note: This paper was selected by the Southeastern Section of the Association of American Geographers/SEDAAG to be the recipient of the "Paper of the Year Award" for 2001).
- Chen, X.D. and 22 others (including Liu, K.B.), 2001. "Simulation of China biome reconstruction based on pollen data from surface sediment samples". *Acta Botanica Sinica* 43 (2): 201-209.
- Liu, K.B. and Fearn, M.L., 2000. "Reconstruction of prehistoric landfall frequencies of catastrophic hurricanes in northwestern Florida from lake sediment records", *Quaternary Research* 54: 238-245.
- Liu, K.B. and Fearn, M.L., 2000. "Holocene history of catastrophic hurricane landfalls along the Gulf of Mexico coast reconstructed from coastal lake and marsh sediments", in: Ning, Z.H. and Abdollahi, K.K. (eds.), *Current Stresses and Potential Vulnerabilities: Implications of Global Change for the Gulf Coast Region of the United States*, Gulf Coast Regional Climate Change Council, Franklin Press, Baton Rouge, pp. 38-47.
- Elsner, J.B., Liu, K.B., and Kocher, B.L., 2000. "Spatial variations in major U.S. hurricane activity: Statistics and a physical mechanism", *Journal of Climate* 13: 2293-2305.
- Murnane, R.J., Barton, C., Collins, E., Donnelly, J., Elsner, J., Emanuel, K., Ginis, I., Howard, S., Landsea, C., Liu, K.B., Malmquist, D., McKay, M., Michaels, A., Nelson, N., O'Brien, J., Scott, D., Webb III, T., 2000. "Model estimates hurricane wind speed probabilities", *EOS, Transactions of the American Geophysical Union* 81(38), 433-438.
- Tang, L.Y., Shen, C.M., Liu, K.B., and Overpeck, J.T., 2000. "Changes in South Asian monsoon: New high-resolution paleoclimatic records from Tibet, China", *Chinese Science Bulletin* 45 (1): 87-90.
- Yu, G. and 30 others arranged alphabetically (including Liu, K.B.), 2000. "Paleovegetation of China: A pollen data-based synthesis for the mid-Holocene and last glacial maximum", *Journal of Biogeography* 27: 635-664.
- Members of China Quaternary Pollen Data Base (23 authors including Liu, K.B.), 2000. "Pollen-based biome reconstruction at Middle Holocene (6 ka BP) and Last Glacial Maximum (18 ka BP) in China", *Acta Botanica Sinica* 42:1201-1209 (in Chinese).
- Tang, L.Y., Shen, C.M., Liu, K.B., and Overpeck, J.T., 1999. "New high-resolution pollen records from two lakes in Xizang (Tibet)", *Acta Botanica Sinica* 41 (8): 896-902 (in Chinese).
- Tang, L.Y., Shen, C.M., Liu, K.B., and Overpeck, J.T., 1999. "Changes in the South Asian paleomonsoon: New high-resolution paleoclimatic records from Tibet", *Kexue Tongbao* 44 (18): 2004-2008 (in Chinese).
- Liu, K.B., Yao, Z., and Thompson, L.G., 1998. "A pollen record of Holocene climatic changes from the Dunde ice cap, Qinghai-Tibetan Plateau", *Geology* 26: 135-138.
- Kremenetski, C.V., Liu, K.B., and MacDonald, G.M., 1998. "The late Quaternary dynamics of pines in northern Asia", in: Richardson, D.M. (ed.), *Ecology and Biogeography of Pinus*, Chapter 4, Cambridge University Press, Cambridge, pp. 95-106.
- Tang, L.Y., Shen, C.M., Kong, Z.Z., Wang, F.B., and Liu, K.B., 1998. "Pollen evidence of climate during the Last Glacial Maximum in eastern Tibetan Plateau", *Journal of Glaciology and Geocryology* 20:

133-140 (in Chinese).

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- Fearn, M.L. and Liu, K.B., 1997. "Identification of maize pollen: Reply to Eubanks", American Antiquity 62: 146-148.
- Colinvaux, P.A., Liu, K.B., De Oliveira, P., Bush, M.B., Miller, M.C., Piperno, D.R., and Steinitz-Kannan, M., 1996. "Temperature depression in the lowland tropics in glacial times," Climatic Change 32: 19-33.
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- Liu, K. B., Sun, S., and Jiang, X., 1992. "Environmental Change in the Yangtze River Delta since 12,000 yr B.P.," Quaternary Research 28: 32-45.
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- Liu, K. B., 1990. "Holocene paleoecology of the boreal forest and Great Lakes-St. Lawrence forest in northern Ontario," Ecological Monographs 60(2):1 79-212.
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- Liu, K. B. and Colinvaux, P. A., 1988. "A 5200-year history of Amazon rain forest," Journal of Biogeography 15:231 -248.
- Ward, J. V. and Liu, K. B., 1988. "Introduction." Review of Palaeobotany and Palynology, 55:1-3.
- Colinvaux, P. A., Frost, M., Frost, I., Liu, K. B., and Steinitz-Kannan, M., 1988. "Three pollen diagrams of forest disturbance in the Western Amazon," Review of Palaeobotany and Palynology, 55:73-81.
- Colinvaux, P. A., Olson, K. N., and Liu, K. B., 1988. "Late-glacial and Holocene pollen diagrams from two endorheic lakes of the inter-Andean Plateau of Ecuador," Review of Palaeobotany and Palynology, 55:83-99.
- Colinvaux, P. A. and Liu, K. B., 1987. "The Late Quaternary climate of the Amazon Basin," in Berger, W. H. and Labeyrie, L. D. (ed.) Abrupt Climatic Change, pp. 113-122, D. Riedel, Dordrecht, Netherlands.
- McAndrews, J. H., Liu, K. B., Manville, G. C., Prest, V. K., and Vincent, J.-S., 1987. "The Environment after 9000 B.C.," in R.C. Harris, (ed.), Historical Atlas of Canada, Vol. 1, Plate 4; University of Toronto

Press, Toronto.

Liu, K. B. and Colinvaux, P. A., 1985. "Forest changes in the Amazon Basin in the last glacial maximum," Nature 318: 556-557.

Colinvaux, P. A., Miller, M. C., Liu, K. B., Steinitz-Kannan, M., and Frost, I. G., 1985. "Discovery of permanent Amazon lakes and hydraulic disturbance in the upper Amazon Basin," Nature 313:42-45

Liu, K. B. and Lam, N. S. N., 1985. "Paleovegetational reconstruction based on modern and fossil pollen data: An application of discriminant analysis," Annals of the Association of American Geographers 75:115-130.

(2) Articles submitted, accepted, or in press (total = 5)

Kiage, L.M., and Liu, K.B. (in press). "Paleoenvironmental changes in the Lake Baringo Basin, Kenya, East Africa since ca. AD 1650: Evidence from the paleorecord", Professional Geographer.

Liu, K.B., Reese, C.A., and Thompson, L.G. (in review). "Vegetation response to late-glacial and Holocene climate change at Nevado Sajama, Bolivia", Geology.

Liu, K.B., Shen, C., Tang, L., Yao, Z., and Overpeck, J.T. (in review). "Modern pollen rain in the Tibetan Plateau", Journal of Biogeography.

Reese, C.A., Cochran, D.M., and Liu, K.B. (in press). "Tropical Storm Gamma and the Mosquitia of eastern Honduras: A little-known story from the 2005 hurricane season", Area.

Tang, L.Y., Shen, C.M., Li, C.H., Peng, J.L., Liu, H., Liu, K.B., Morrill, C., Overpeck, J.T., Cole, J.E., and Yang, B. (in press). "Pollen-inferred vegetation and environmental changes in the central Tibetan Plateau since 8200 year BP", Science in China.

C. Other Articles (total = 18)

Liu, K.B., 2003. "Documentary records of typhoon landfalls in China during the past 1,000 years: Historical climatology and societal implications," pp. 43-57, in Tsukahara, T. and Mikami, T. (eds.), Encounter Between Meteorology and History of Science. Kobe University, Kobe, Japan (in Japanese, with English abstract).

Liu, K.B., 1999. "Millennial-scale variability in catastrophic hurricane landfalls along the Gulf of Mexico coast", Preprint Volume of the 23rd Conference on Hurricanes and Tropical Meteorology, 10-15 January, 1999, Dallas, American Meteorological Society, Boston, pp. 374-377.

Elsner, J.B., Liu, K.B., and Kocher, B.L., 1999. "Trends in hurricane landfall probabilities in the U.S.", Preprint Volume of the 23rd Conference on Hurricanes and Tropical Meteorology, 10-15 January, 1999, Dallas, Texas, American Meteorological Society, Boston, MA, pp. 384-387.

Liu, K.B. and Fearn, M.L., 1997. "Lake sediment records of hurricane Opal and prehistoric hurricanes from the Florida Panhandle", Preprint Volume of the 22nd Conference on Hurricanes and Tropical Meteorology, 19-23 May, 1997, Fort Collins, Colorado, American Meteorological Society, Boston, MA, pp. 397-398.

Liu, K.B., 1995. "Pollen analysis of soil samples from the Rock Levee site", in Weinstein, R.A., Fuller, R.S., Scott, S.L., Scarry, C.M., and Duay, S.T., The Rock Levee site: Late Marksville through Late Mississippi period settlement, Bolivar County, Mississippi. The Beulah Levee Project: Archaeology and History, Vol. III, Contract Report submitted to the U.S. Army Corps of Engineers, by Coastal Environments, Inc., Baton Rouge, pp. 349-350.

Hunter, D.G., Fritz, G.J., Autin, W.J., and Liu, K.B., 1994. Manifest East: Cultural Resources Investigations along portions of Louisiana Highway 8, Catahoula Parish, Louisiana, Report submitted to the Louisiana Department of Transportation and Development, Coastal Environments Inc., Baton Rouge, 390 p.

Liu, K.B., 1994. "Pollen analysis of archaeological soil samples from the Possum Bluff and Kendrick's Hill sites, Jackson County, Texas," in Weinstein, R.A., Archaeological Investigations along the Lower

- Lavaca River, Jackson County, Texas: The Channel to Red Bluff Project, Coastal Environments Inc., Baton Rouge, pp. 343-344.
- Liu, K.B., 1994. "Pollen analysis of archaeological soil samples from Site 16 LF 250, Lafourche Parish, Louisiana", in Weinstein, R.A., Cultural Resources Investigations related to the West Belle Pass Headland Restoration Project, Lafourche Parish, Louisiana, Coastal Environments Inc., Baton Rouge, pp. 145-146.
- Fan, M., Lam, N.S.N., and Liu, K.B., 1993. "Using GIS to model the spatial spread of the AIDS epidemic in the United States," American Congress on Surveying and Mapping (ACSM) Technical Papers, 1993 Annual Convention and Exposition, New Orleans, pp. 186-195.
- Liu, K.B., 1992. "Pollen analysis of soil samples from archaeological sites along the Victoria Barge Canal," in Weinstein, R.A., Archaeology and Paleogeography of the Lower Guadalupe River/San Antonio Bay Region. Contract Report for the U.S. Army Corps of Engineers, Coastal Environments Inc., Baton Rouge, pp. 429-430.
- Liu, K.B., 1991. "Quaternary vegetational history of the monsoonal regions of China," Special Proceedings for Symposia of the XIII INQUA Congress, Beijing, China. pp. 111-113.
- Colinvaux, P. A., Liu, K. B., and Frost, I., 1986. "Palynological and paleolimnological evidence for late-Quaternary climate changes in the Western Amazon Basin," in Berger, W. H. and Labeyrie, L. D. (eds.) The Book of Abstracts and reports from the conference on: Abrupt Climatic Change. pp. 74-80. 510 Reference 86-8, Scripps Institution of Oceanography.
- Liu, K.B., 1985. "Pollen analysis of mud samples associated with human remains: A preliminary report," in Owsley, D. W., Orser, C. E. Jr., Montgomery, R., and Holland C., An Archaeological and physical anthropological study of the first cemetery in New Orleans, Louisiana. pp. 215-220.
- Liu, K.B. and Lam, N.S.N., 1985. "Discriminant analysis of Late Quaternary pollen stratigraphies from Ontario," Modeling and Simulation 16:155-159.
- Lam, N.S. and Liu, K.B., 1984. "A geographic information system for the Palynologists: An Ontario example," Modeling and Simulation 15:93-97.
- Lai, K.W., Liu, K.B., Yeung, K.C., Leung, C.F., Wai, C.C., 1982. "A Preliminary study on the Geological structure of Ma Shi Chau, Hong Kong," The Geographical Bulletin 16:69-90 (in Chinese, with English abstract).
- Liu, K.B., 1981. "Pollen evidence of late-Quaternary climatic changes in Canada: a review. Part II. Eastern Canada," Ontario Geography 17:61-82.
- Liu, K.B., 1980. "Pollen evidence of late-Quaternary climatic changes in Canada: a review. Part I. Western Canada," Ontario Geography 15:83-101.

D. Book Reviews and Commentaries

- Liu, K.B., 1994. "Reply: Lake-sediment record of late Holocene hurricane activities from coastal Alabama", Geology 22(3): 285.
- Liu, K.B., 1991. "Commentary: People and Environment in the Zhu Jiang Delta," National Geographic Research and Exploration 7(1): 121.
- Liu, K.B., 1986. "Book review: Biological Diversification in the Tropics." Professional Geographer 38: 450-451.

PAPERS PRESENTED AT PROFESSIONAL MEETINGS (with Published Abstracts) (total = 164) (showing last 3 years only)

- Bianchette, T.A., Liu, K.B., Lam, N.S-N., and Kiage, L.M.
 2009 "Ecological Impacts of Hurricane Ivan on the Gulf Coast of Alabama: A Remote Sensing Study", Paper presented in the International Coastal Symposium (ICS2009), Lisbon, Portugal, April 16-19, 2009.

- Lam, N.S.-N., Arenas, H., Li, Z., and Liu, K.B.
 2009 “An estimate of population impacted by climate change along the U. S. coast”, Paper presented in the International Coastal Symposium (ICS2009), Lisbon, Portugal, April 16-19, 2009.
- Liu, K.B.
 2009 “Paleotempestology”, Invited lecture presented at the *Segundo curso de primavera sobre ciclones tropicales, con enfasis en los ciclones que se desarrollan sobre el oceano Pacifico Oriental*, Acapulco, Mexico, March 9-13, 2009.
- Liu, K.B., Li, C., Weeks, E., Bianchette, T.A., and Yao, Q.
 2009 “Hydrodynamic and Sedimentary Changes in a Coastal Backbarrier Lake in Louisiana Caused by Hurricanes Gustav and Ike,” Paper presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- McCloskey, T.A., Liu, K.B., Urquhart, G.R., and Taleno, C.P.
 2009 “Hurricane history for the southern Caribbean coast of Nicaragua”, Paper presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- Bianchette, T.A., and Liu, K.B.
 2009 “Eastern North Pacific hurricane trajectories and rainfall climatology: implications and possibilities for Mexican paleotempestology,” Paper presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- Kar, D., Liu, K.B., and McCloskey, T.A.
 2009 “Applications of Paleotempestology in Hurricane Risk Assessment of Northern Nicaragua’s Mosquito Coast”, Paper presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- Kennedy, L.M., Liu, K.B., Kar, D., McCloskey, T.A., Leblanc, A., and Desjardins, A.,
 2009 “Sedimentary records of hurricane landfalls in coastal lakes of the Dominican Republic”, Paper presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- Liu, K.B.
 2009 “How to perform interdisciplinary paleoenvironmental research”, Panel discussion presented in the 105th Annual Meeting of the Association of American Geographers, Las Vegas, March 23-27, 2009.
- McCloskey, T.A., and Liu, K.B.
 2009 “Prehistoric Hurricane Activity”, Paper presented in the Mineral Management Service (MMS) Information Transfer Meeting (ITM), New Orleans, January 6, 2009.
- Kar, D., McCloskey, T.A., Liu, K.B., and Kennedy, L.M.
 2009 “Reconstructing paleohurricane disturbance regimes in the Dominican Republic”, Paper presented in the International Biogeography Society (IBS) meeting, Merida, Mexico, January 8-12, 2009.
- Liu, K.B. and Knowles, J.T.
 2008 “Proxy Record of Holocene Hurricane Activity from Barbuda in the Northeastern Caribbean,” Invited paper presented in the American Geophysical Union (AGU) 2008 Fall Meeting, San Francisco, December 15-19, 2008.
- Liu, K.B.
 2008 “Large, Infrequent Disturbances in Deltaic Ecosystems: The Need for a Long-term Perspective in Ecosystem Management and Coastal Restoration”, Invited paper presented in the *Symposium on Sustainable Management of Deltaic Ecosystems: Integration of Theory and Practice*, LSU School of the Coast & Environment, Baton Rouge, August 25-26, 2008.
- Liu, K.B.
 2008 “Past variability of tropical cyclones: What can we learn from paleotempestology?” Invited plenary address presented in the National Center for Atmospheric Research (NCAR) Early Career Scientists Assembly – Junior Faculty Forum (ECSA-JFF) on Future Scientific

- Directions, *The thermohaline circulation and tropical cyclones in past, present, and future climates*, Boulder, Colorado, July 8-10, 2008.
- Liu, K.B., Reese, C.A., Cochran, D.M., and Bianchette, T.A.
2008 "Sedimentary Record of Tropical Storm Gamma in the Coastal Lagoons of Eastern Honduras," Paper presented in the 104th Annual Meeting of the Association of American Geographers, Boston, April 15-19, 2008.
- Bianchette, T.A. and Liu, K.B.
2008 "Hurricane-induced Sediment Deposition in Coastal Lakes: A Case Study from Bay Champagne, Louisiana," Paper presented in the 104th Annual Meeting of the Association of American Geographers, Boston, April 15-19, 2008.
- McCloskey, T.A., Liu, K.B., and Chi, F.
2008 "A 7,000-year paleoenvironmental history from the Turneffe Atoll, Belize, Central America," Paper presented in the 104th Annual Meeting of the Association of American Geographers, Boston, April 15-19, 2008.
- Frappier, A., Knutson, T., Liu, K.B., and Emanuel, K.,
2008 "Emerging Research Opportunities in Tropical Cyclone-Climate Interactions at the Intersections of Paleotempestology and Tropical Cyclone Dynamics," Paper presented in the 104th Annual Meeting of the Association of American Geographers, Boston, April 15-19, 2008.
- Liu, K.B.
2008 "Paleotempestology", Invited lecture presented at the *Curso de primavera sobre ciclones tropicales, con enfasis en el Pacifico Oriental*, La Paz, Baja California Sur, Mexico, March 9-14, 2008.
- Liu, K.B.
2007 "Paleotempestology: Research questions, needs, and priorities," Invited talk presented at the First International Summit on *Hurricanes and Climate Change*, Crete, Greece, May 26 – June 1, 2007.
- Liu, K.B.
2007 "Hurricane risk and societal vulnerability in the Caribbean region," Invited talk presented at the *United Nations Framework Convention on Climate Change (UNFCCC) expert meeting on Adaptation for Small Island Developing States (SIDS)*; Kingston, Jamaica, February 4-8, 2007.
- Liu, K.B., Elsner, J.B., Bianchette, T.A., and Jagger, T.H.
2007 "Using Hurricane Ivan as a modern analog to calibrate paleohurricane intensity estimates in the proxy record," Paper presented in the 103rd Annual Meeting of the Association of American Geographers, San Francisco, April 17-21, 2007.
- Huang, Y., Lu, H.Y., and Liu, K.B.
2007 "Records of Hurricanes Ivan and Katrina in the sediment from Weeks Bay, Alabama," Paper presented in the 103rd Annual Meeting of the Association of American Geographers, San Francisco, April 17-21, 2007.
- Kiage, L.M., and Liu, K.B.
2007 "Multi-proxy evidence of vegetational change and land degradation around Lake Baringo since AD 1650," Paper presented in the 103rd Annual Meeting of the Association of American Geographers, San Francisco, April 17-21, 2007.

GRANTS AND AWARDS (Liu as PI or co-PI) (total awards = 46 (23 from NSF); total amount >\$3 million, counting my LSU portion only)

- 2009-11 **Inter-American Institute for Global Change Research (IAI)** (\$120,000). "Paleotempestology of Eastern North Pacific (ENP) hurricanes along the Pacific coast of Mexico", addendum to grant agreement CRN II 050. (PI: Kam-biu Liu).
- 2008-12 **LSU Graduate School**, Economic Development Assistantship (EDA), (\$100,000). "Paleotempestology-based hurricane risk assessment for Louisiana". (PI: Kam-biu Liu).
- 2008-09 **DOE National Institute for Climate Change Research** (\$77,000). "Effects of Past and Recent Hurricanes on Gulf Coast Ecosystems: Implications for Future Climate Changes". (PI: Kam-biu Liu; co-PIs: Nina Lam, W.J. Platt).
- 2006-11 **Inter-American Institute for Global Change Research (IAI)**, Collaborative Research Network grant (CRN II 050) (\$698,300). "Paleotempestology of the Caribbean region: A multi-proxy, multi-site study of the spatial and temporal variability of Caribbean hurricane activity". This is a 5-year collaborative research project involving 12 co-PIs from four different countries in the Americas (PI: Kam-biu Liu).
- 2006-07 **LSU Faculty Research Grant** (\$10,000). "Climate change, sea level rise, and hurricanes/typhoons in two of the world's largest river systems: developing comparative ecological study of the Yangtze and Mississippi River deltas". (PI: Kam-biu Liu; co-PI: W.J. Platt).
- 2006-09 **National Science Foundation (NSF)**, research grant (\$139,991), Geography & Regional Science Program, BCS-0623514. "Collaborative Research: Bioclimatic reconstruction of the past 50,000 years from eolian sequences in westerlies-dominated Central Asia ". (PI: Kam-biu Liu; collaborative PI: Z.D. Feng, Montclair State Univ., total award for LSU and MSU: \$289,897).
- 2006-08 **National Science Foundation (NSF)**, Doctoral dissertation research improvement (DDRI) grant (\$11,940), Geography and Regional Science Program, BCS-0623287. "Tracking Donna across the northern Caribbean: Developing a modern analog methodology for paleotempestology" (PI: Kam-biu Liu; co-PI: Jason Knowles, Ph.D. student)
- 2006-07 **National Science Foundation (NSF)**, SGER grant (\$32,658), Division of Environmental Biology (DEB-0612477). "Do hurricanes spur responses of coastal communities to changing sea level?" (PI: William J. Platt; co-PIs: Kam-biu Liu, Julie Whitbeck, University of New Orleans; Loretta Battaglia, Southern Illinois University; total award for LSU, UNO, and SIU: \$50,000).
- 2006-08 **National Science Foundation (NSF)**, Doctoral dissertation research improvement (DDRI) grant (\$11,760), Geography and Regional Science Program, BCS-0602554. "Proxy records of paleohurricane activities for the western and southern Caribbean" (PI: Kam-biu Liu; co-PI: Terrence McCloskey, Ph.D. student).
- 2006-09 **National Science Foundation (NSF)**, research grant (\$132,251), Human and Social Dynamics (HSD)-Agents of Change Program, HSD-0527620. "Paleoclimatic change, landscape evolution, and cultural transformations in far western Tibet". (lead PI: Mark S. Aldenderfer; co-PIs: Jonathan Overpeck, Julie Cole, Jon Pelletier: University of Arizona; Kam-biu Liu, LSU; total award for UA and LSU: \$725,789).
- 2005-07 **National Science Foundation (NSF)**, research grant (\$92,292), Geography & Regional Science Program, BCS-0452399. "Collaborative Research: An integrative study of vulnerability and cultural response to hurricane hazards among indigenous populations on the Miskito coast of Honduras and Nicaragua ". (PI: Kam-biu Liu; collaborative PIs: Andy Reese and David Cochran, University of Southern Mississippi; total award for LSU and USM: \$199,868)
- 2005-07 **National Science Foundation (NSF)**, Doctoral dissertation research improvement (DDRI) grant (\$11,925), Geography and Regional Science Program, BCS-0503334. "Vegetation

- change and land degradation in the Lake Baringo ecosystem, Kenya, East Africa: Evidence from the paleorecord " (PI: Kam-biu Liu; co-PI: Lawrence Kiage, Ph.D. student).
- 2005-07 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$40,000), "Hurricane Ivan as modern analog to prehistoric hurricane strikes". (PI: Kam-biu Liu).
- 2005-06 **National Geographic Society (NGS)** research grant (\$9,940). "Documenting Hurricane Katrina's overwash for use as a modern analog for hurricane reconstructions on the Gulf Coast." (PI: Andy Reese, University of Southern Mississippi; co-PI: Kam-biu Liu, LSU).
- 2004-07 **National Science Foundation (NSF)**, research grant (\$125,081), Earth System History Program, ATM-0402475. "Collaborative Research: Holocene Climatic Changes in the Mongolian Plateau". (PI: Kam-biu Liu; collaborative PIs: Zhaodong Feng, Monclair State University; Alexander Prokopenko, University of South Carolina; total award for LSU, MSU, & USC: \$370,641)
- 2002-06 **National Science Foundation (NSF)**, research grant (\$167,730), co-funded by the Geography & Regional Science Program and the Climate Dynamics Program, BCS-0213884. "Collaborative Research: The role of the North Atlantic Oscillation (NAO) in modulating major hurricane activity in the U.S.: Interannual to millennial timescales". (PI: Kam-biu Liu; collaborative PI: James Elsner, Florida State University; total award for LSU & FSU: \$299,921)
- 2002-03 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$35,000), "New estimates of landfall probabilities for catastrophic hurricanes along the U.S. Gulf coast". (P.I.) (Duration: 12 months, October 1, 2002-September 30, 2003).
- 2002-03 **National Science Foundation (NSF)** Doctoral dissertation improvement supplement grant (\$4,000), Geography and Regional Science Program, BCS-0217321. "Pollen dispersal and deposition on tropical Andean ice caps: Quelccaya, Peru, and Nevada Sajama, Bolivia". (with Carl A. Reese, Ph.D. student) (8 months, May - December 2002)
- 2001-02 **National Science Foundation (NSF)** Doctoral dissertation improvement grant (\$9,905), Geography and Regional Science Program and Americas Program, BCS-0117338. "Pollen dispersal and deposition on tropical Andean ice caps: Quelccaya, Peru, and Nevada Sajama, Bolivia". (with Carl A. Reese, Ph.D. student) (18 months, July 2001 - December 2002)
- 2001-02 **U.S. Environmental Protection Agency (EPA)**, research grant, Subcontract through Southern University (\$15,000), "Vulnerability of the Alabama Gulf Coast to intense hurricane strikes and forest fires in the light of long-term climatic changes". (P.I.) (March - July, 2001)
- 2001-02 **National Park Service (NPS)** research contract (\$2,500), "Pollen analysis of soil samples from the Melrose flower garden, Natchez National Historic Park, Mississippi". (P.I.) (Duration: 12 months, June 2001 - June 2002).
- 2000-02 **National Science Foundation (NSF)**, research grant (\$104,049), co-funded by Earth System History Program and the Office of Polar Programs, ATM-0081941. "Collaborative Research: Century-scale variability in the Asian Southwest monsoon". (co-PI) (Duration: 2 year, September 2000 - August 2002) (Lead-PIs: Jonathan Overpeck and Julia Cole, University of Arizona, PI: Kam-biu Liu; total award for LSU & UA: \$223,451)
- 2000-01 **National Science Foundation (NSF)** doctoral dissertation improvement grant (\$9,850), Geography and Regional Science Program, BCS-0002346. "Holocene history of Atlantic tropical forest and cerrado in southeastern Brazil". (with Andre Tabanez, Ph.D. student) (12 months, July 2000 - June 2001)
- 2000-01 **National Science Foundation (NSF)**, Research Experience for Undergraduate (REU) Supplement grant (\$4,690), funded by Geography and Regional Science Program, "Modern pollen-vegetation relationships in the Bolivian Altiplano: Key to deciphering the pollen record from ice cores". (P.I.) (Duration: 1 year, July 1, 2000-June 30, 2001)
- 2000-01 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$30,000), "Lake-sediment records of intense hurricane landfalls from

- Cumberland Island, Georgia". (P.I.) (Duration: 12 months, October 1, 2000-September 30, 2001).
- 1999-01 **National Science Foundation (NSF)** research grant (\$70,466), co-funded by Geography and Regional Science and Paleoclimate Programs, BCS-9906002. "Paleoenvironmental changes in the Bolivian Altiplano: A high-resolution pollen record from the Sajama Ice Cap". (P.I.) (Duration: 2 years, September 1, 1999-August 31, 2001)
- 1999-01 **National Science Foundation (NSF)** research grant (\$39,937), Earth System History Program, ATM-9905329. "Reconstructing a 1,000-year record of typhoon landfalls from Chinese historical documentary evidence". (P.I.) (Duration: 16 months, October 1, 1999-January 31, 2001)
- 1999-00 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$70,000), "Reconstructing the hurricane landfall probabilities of the northern Atlantic coast: Lake sediment records from Cape Cod, Massachusetts". (P.I.) (Duration: 12 months, July 1, 1999-June 30, 2000).
- 1998-99 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$75,000), "Reconstructing the landfall probabilities of catastrophic hurricanes from lake-sediment records along the mid-Atlantic coast". (P.I.) (Duration: 12 months, July 1, 1998-June 30, 1999).
- 1997-98 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$70,000), "Reconstructing the recurrence intervals of catastrophic hurricanes: Lake and marsh sedimentary records from the Gulf Coast". (P.I.) (Duration: 13 months, June 1, 1997-June 30, 1998).
- 1996-97 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$70,000), "Reconstructing the recurrence intervals of catastrophic hurricanes: Lake and marsh sedimentary records from the Gulf Coast". (P.I.) (Duration: 13 months, June 1, 1996-June 30, 1997).
- 1996-97 **Bermuda Biological Station for Research (BBSR), Risk Prediction Initiative (RPI)** research grant (\$4,200), "Reconstructing a 1,000-year record of typhoon activities from Chinese historical documentary evidence: A pilot study for Guangdong Province". (P.I.) (Duration: 13 months, June 1, 1996-June 30, 1997)
- 1995-96 **National Science Foundation (NSF)** doctoral dissertation improvement grant (\$9,970), Geography and Regional Science Program, SBR-9506344. "Paleo-environmental change in mainland Southeast Asia: Palynological evidence from Cambodia". (with Andrew Maxwell, Ph.D. student) (18 months, 7/95-12/96)
- 1995 **National Oceanic and Atmospheric Administration (NOAA)** research grant (\$17,466), Climate and Global Change Program. "Workshop: Towards establishing a Quaternary pollen database in China". (P.I.) (Duration: 9 months, March 1995-December 1995)
- 1995 East Baton Rouge Parish Recreation and Park Commission (BREC), research contract (\$700). "Lead-210 dating of sediment cores from the Bluebonnet Swamp". (P.I.) (Duration: 5 months, January 1995-May 1995)
- 1994-95 **U.S. Department of Health and Human Services (DHSS)** research grant, Subcontract through **RAND** (\$50,701), "Development of rural clusters for AIDS patient sampling". (co-PIs: Nina Lam & Kam-biu Liu) (Duration: 9 months, October 1994-June 1995)
- 1994-97 **National Science Foundation (NSF)** research grant (\$230,570), Climate Dynamics Program, ATM-9410491. "Long-term dynamics of the SW Indian monsoon: New high-resolution paleoclimatic data from Tibet". (P.I.) (Duration: 3 years, June 1994-June 1997)
- 1994-96 **National Science Foundation (NSF)** research grant (\$40,890), Geography and Regional Science Program, SBR-9410411. "A high-resolution pollen record from the Dunde Ice Cap, western China". (P.I.) (Duration: 2 years, July 1994-July 1996)
- 1994-95 East Baton Rouge Parish Recreation and Park Commission (BREC), research contract (\$750).

- "Diatom analysis of sediment cores from the Bluebonnet Swamp". (P.I.) (Duration: 1 year, March 1994-February 1995)
- 1992-93 **National Science Foundation (NSF)** research grant (\$97,879), Geography and Regional Science Program, SES-9122058. "Reconstructing the Late-Holocene hurricane climate of the northern Gulf of Mexico coast." (P.I.) (Duration: 1 year, June 1992-June 1993)
- 1991-92 **National Science Foundation (NSF)**, Doctoral Dissertation Improvement Grant (\$5,980), Geography and Regional Science Program, SES-9105493. "Louisiana's Cajun prairie: Holocene history of a subtropical grassland." (P.I.; with Miriam Fearn, Ph.D. student) (Duration: 1 year, July 1991-July 1992)
- 1990-92 **Louisiana Education Quality Support Fund (LEQSF-8g)** (\$83,219). "Modeling the Spatial dynamics of AIDS in the United States: A geographic information systems approach." (Co-P.I., with Nina Lam) (Duration: 2 years, June 1990-June 1992)
- 1990 U. S. National Committee for the International Geographical Union (USNC/IGU) travel grant (\$1,500) for attending the Asian Pacific Regional Conference of the International Geographical Union in Beijing, China.
- 1990-91 **National Science Foundation (NSF)** research grant (\$13,485), co-funded by the Geography and Regional Science Program and Climate Dynamics Program, SES-8922033. "Lake sediment and pollen records of hurricane disturbance along the Alabama Gulf Coast." (P.I.) (Duration: 1 year, January 1990-January 1991)
- 1990-91 **National Science Foundation (NSF)**, Doctoral Dissertation Improvement Grant (\$9,290), Geography and Regional Science Program, SES-9001343. "Late-Quaternary vegetation and monsoon climate history of Southeast China," (P.I.; with Hong-lie Qiu, Ph.D. student) (Duration: 1 year, May 1990-May 1991)
- 1988 U.S. National Committee for the International Geographical Union (USNC/IGU) travel grant (\$1,000) for attending the International Geographical Congress in Sydney, Australia.
- 1986-87 **National Geographic Society (NGS)** research grant #3369-86 (\$23,900). "Environmental Change in East China during the last 30,000 years." (P.I.) (Duration: 18 months, June 1986-December 1987)
- 1985 L.S.U. Summer Faculty Research Grant (\$4,000), "Quaternary climate and vegetational history of China: Palynological studies." (P.I.)
- 1984 **Association of American Geographers (AAG)** Research Grant (\$500), "The Quaternary environment of China: An evaluation of the pollen evidence." (P.I.)
- 1983 Warren Nystrom Award, Association of American Geographers (\$150) (To honor the best paper presented in a special session of the AAG meeting that is based on a recently completed dissertation in Geography).

PROFESSIONAL SERVICE AND RECOGNITION

A. External Reviewer/Visiting Examiner of Academic Programs

- 2005 Program reviewer, Department of Geosciences, University of Massachusetts-Amherst
- 1998-01 Visiting Examiner (appointed for three-year term, 1998-2001), Department of Geography, The Chinese University of Hong Kong

B. External Examiner of Theses and Dissertations

- 2006 Department of Geography and Resource Management, Chinese University of Hong Kong (M. Phil. thesis)
- 2005 Department of Geography, University of Toronto (Ph.D. dissertation)
- 2004 Department of Geography, McGill University (M.Sc. thesis)

C. Reviewer of Journal Articles (5-12 times per year)

Advances in Atmospheric Sciences
Ambio
Annals of Glaciology
Annals of the Association of American Geographers
Chinese Science Bulletin
Climatic Change
Climate Dynamics
Earth and Planetary Science Letters
EOS
Geographical Analysis
Geoarchaeology
Geochemistry, Geophysics, and Geosystems (G-cubed)
Geology
Geophysical Research Letters
Global and Planetary Change
Global Ecology and Biogeography
Historical Geography
Journal of Biogeography
Journal of Coastal Research
Journal of Geophysical Research
Journal of Glaciology
Journal of Paleolimnology
Journal of Quaternary Science
Marine Geology
Marine Micropaleontology
National Geographic Research
Nature
Palaeogeography, Palaeoclimatology, Palaeoecology
Palynology
Pedosphere
Plant Ecology
Proceedings of the National Academy of Sciences, U.S.A.
Professional Geographer
Quaternary International
Quaternary Research
Quaternary Science Reviews
Review of Palaeobotany and Palynology
Revista de Biología Tropical
Science
Southeastern Geographer
Terrestrial, Atmospheric and Oceanic Sciences
Texas Journal of Science
The Holocene
Transactions of the Gulf Coast Association of Geological Societies
Vegetation History and Archaeobotany

D. External Reviewer of Grant Proposals

National Science Foundation (NSF):

Earth System History Program
 Paleoclimatology/Climate Dynamics Program
 Geography & Regional Science Program
 Marine Geology and Geophysics Program
 Anthropology Program
 Geology and Paleontology Program
 Ecology Program
 Women Visiting Scientists Program
 Polar Glaciology Program

NOAA Climate and Global Change Program

DOE National Institute for Climate Change Research (NICCR)

National Geographic Society

American Philosophical Society

Coastal Restoration and Enhancement through Science and Technology program (CREST)

Natural Environment Research Council (NERC), United Kingdom

National Science Council, Taiwan

Hong Kong Research Grants Council (HKRGC), Hong Kong

Chinese National Natural Science Foundation (NSFC)

F. Editorships

2008- Associate Editor, *Chinese Science Bulletin* (Springer)

2008- Editorial Board member, *Quaternary Science* (Science Press, China)

2001- Editorial Board member, *Journal of Geographical Sciences* (Springer)

1995-97 Editorial Board member, *Chinese Environment and Development* (Publisher: Sharpe)

1988-93 Editor-in-chief, *Geoscience and Man*, Department of Geography & Anthropology, LSU

1975-76 Editor-in-chief, *Teaching Through Learning Magazine* (Bimonthly), Hong Kong

1972-73 Editor-in-chief, *CU Student* (Monthly student newspaper, Chinese University of Hong Kong)

1971-72 Editor-in-chief, *Chung Chi Student* (Monthly student newspaper, Chung Chi College, The Chinese University of Hong Kong)

H. Invited and Sponsored Speaker

2009 Department of Geography and Resource Management, The Chinese University of Hong Kong, June 10, 2009

2009 IAI CRN II PIs meeting, sponsored by The Inter-American Institute for Global Change Research, Montevideo, Uruguay, June 24-26, 2009.

2009 Segundo curso de primavera sobre ciclones tropicales, con enfasis en los ciclones que se desarrollan sobre el oceano Pacifico Oriental, Acapulco, Mexico, March 9-13, 2009.

2009 Inaugural Meeting, Coastal Barrier Island Network (CBIN), NSF-sponsored, Galveston, Texas, January 3-7, 2009.

2008 Department of Geology, Baylor University, September 18-20, 2008

2008 Symposium on "Sustainable Management of Deltaic Ecosystems: Integration of Theory and Practice", LSU School of the Coast & Environment, Baton Rouge, August 25-26, 2008.

2008 Plenary speaker, National Center for Atmospheric Research (NCAR) Early Career Scientists Assembly – Junior Faculty Forum (ECSA-JFF) on Future Scientific Directions, "The

- thermohaline circulation and tropical cyclones in past, present, and future climates”, Boulder, Colorado, July 8-10, 2008.
- 2008 Curso de primavera sobre ciclones tropicales, con énfasis en el Pacífico Oriental, La Paz, Baja California Sur, México, March 9-14, 2008.
- 2008 IAI CRN II PIs meeting, sponsored by The Inter-American Institute for Global Change Research, Buenos Aires, Panama City, Panama, February 20-22, 2008.
- 2008 LSU Museum of Natural Science, Friday Forum, February 8, 2008.
- 2007 Sigma Xi, LSU Chapter (luncheon speaker), Baton Rouge, October 18, 2007.
- 2007 First International Summit on *Hurricanes and Climate Change*, Crete, Greece, May 26 - June 1, 2007.
- 2007 Department of Earth and Environmental Sciences, Tulane University, March 9, 2007.
- 2007 United Nations Framework Convention on Climate Change (UNFCCC) expert meeting on *Adaptation for Small Island Developing States (SIDS)*, sponsored by The Inter-American Institute for Global Change Research; Kingston, Jamaica, February 4-8, 2007.
- 2006 Earth System Science Partnership (ESSP) Global Environmental Change (GEC) Open Science Meeting, sponsored by The Inter-American Institute for Global Change Research, Beijing, November 7-13, 2006.
- 2006 GCAGS/ GCSSEPM/ IGCP-490 convention, Keynote speaker, Lafayette, Louisiana, September 26, 2006.
- 2006 IAI CRN II Initial PI & AIR meeting, sponsored by The Inter-American Institute for Global Change Research, Buenos Aires, Argentina, May 4-5, 2006.
- 2006 *Tropical Cyclone and Climate Workshop*, sponsored by the International Research Institute for Climate and Society (IRI), Lamont-Doherty Earth Observatory, Columbia University, New York, March 27-29, 2006.
- 2006 Department of Biological Sciences, Florida Institute of Technology, sponsored by the Florida Sea Grant Program, February 23, 2006.
- 2005 Joint workshop of the *Inter-American Institute (IAI)* and *SCOPE* Rapid Assessment Process (RAP), “Linking the Sciences of Environmental Change to Society and Policy”, Ubatuba, Brazil, November 25 to December 1, 2005.
- 2005 *U.S. Climate Change Program (CCSP) Workshop: Climate Science in Support of Decision Making*, Washington, DC, November 14-16, 2005.
- 2005 Sigma Xi, LSU Chapter (luncheon speaker), Baton Rouge, October 9, 2005.
- 2005 *10th Americas Conference on Wind Engineering* (banquet speaker), Baton Rouge, June 2, 2005
- 2005 Department of Geography, University of Minnesota, “Global Change and Changing Landscapes” speaker series, February 16-18, 2005
- 2004 IAI Paleohurricane workshop, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, October 7-8, 2004
- 2004 Department of Geological Sciences, University of South Carolina, February 16, 2004
- 2003 *2003 PCS Catastrophe Conference* (keynote speaker), Orlando, May 4-7, 2003
- 2003 *International Symposium for the East Asian Network for Environmental History and Climate Change*, Kobe, Japan, January 12, 2003
- 2002 *Conference on the Hadley Circulation: Present, Past, and Future*, Honolulu, Hawaii, November 12-15, 2002
- 2002 International workshop on “*Historical Climate Reconstruction over East Asia*”, Beijing, China, October 14-16, 2002
- 2002 Department of Geosciences, Princeton University
- 2002 *International Conference on Environmental Catastrophes and Recovery in the Holocene*, Brunel University, London, U.K., August 28--Sept 2, 2002
- 2001 Center for Climatic Research, University of Wisconsin-Madison
- 2001 *Symposium on Asian Monsoons and Global Linkages on Milankovitch and Sub-Milankovitch*

- Timescales*, Beijing, China, May 9-11
- 2001 Institute of Geography, Chinese Academy of Sciences, Beijing
- 2001 Institute of Geology, Chinese National Academy of Sciences, Beijing
- 2001 Co-organizer and invited speaker, NSF/NOAA Workshop on “Atlantic Basin Paleohurricane Reconstructions from High-resolution Records”, Columbia, South Carolina, March 24-27.
- 2001 NSF Workshop on “Paleoclimatology of the Central Andes”, Tucson, Arizona, January 11-15, 2001
- 2000 Department of Geography, The Chinese University of Hong Kong
- 2000 *PCS Catastrophe Conference* (featured speaker), Scottsdale, Arizona
- 1999 International workshop on “Climate Variability Reconstructed from Historical Evidence and Other Proxy Records”, Manzanillo, Mexico
- 1999 “Global Pollen Database” workshop, funded by NOAA, Boulder, Colorado
- 1999 Department of Geosciences, University of Nebraska, Lincoln
- 1998 PAGES (Past Global Changes) Workshop on “Calibration of Historical Data for Reconstruction of Climatic Variations”, Barcelona, Spain, July 6-8, 1998.
- 1997 BIOME 6000 Workshop: "Late Quaternary Paleoenvironments of Pacific Asia", Sweden, September 1-5.
- 1997 Risk Prediction Initiative "Windspeed Probabilities" Workshop, Bermuda Biological Station for Research, Bermuda, July 14-15.
- 1997 Risk and Insurance Management Society (RIMS) annual meeting, Atlanta, April 14-17.
- 1996 Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology (MIT)
- 1996 Risk Prediction Initiative "Climate Variability and Tropical Cyclone Prediction" Workshop, Bermuda Biological Station for Research, Bermuda
- 1996 Department of Geological Sciences, Ohio State University
- 1994 Department of Geography, UCLA
- 1994 IGBP-PAGES workshop "Multiproxy Paleoenvironmental Mapping Project", funded by IGBP-PAGES, San Francisco, December 3-5.
- 1994 IGBP-PAGES workshop "Towards a Global Paleovegetational Dataset", funded by NOAA and IGBP, Sweden, May 9-13.
- 1993 IGBP-PAGES (Past Global Change) Workshop on "High Resolution Records of Climate in Monsoon Asia: The Last 2000 Years and Beyond," funded by NSF (U.S.) and National Research Council (Taiwan), Taipei, Taiwan, April 21-23.
- 1992 13th International CODATA Conference, funded by World Data Center, Panel on Paleoclimate Data, Beijing, China, October 19-22.
- 1992 Dept. of Geography, Texas A & M University
- 1992 NOAA Paleoclimate Program, Boulder, Colorado
- 1990 Department of Geography, Texas A & M University
- 1990 Department of Geography, University of Iowa
- 1989 Department of Geography, University of Tennessee
- 1985 Nanjing Institute of Geography, Academia Sinica, People's Republic of China
- 1985 NSF/NATO Workshop on “Abrupt Climatic Change”, Biviers, France

I. Appointed or Elected Office in Professional Organizations

- 2008-11 Member (elected), AAAS Electorate Nominating Committee, Section E (Geology and Geography)
- 2002-04 Member of Doctoral Dissertation Research Improvement (DDRI) Panel (appointed), Geography & Regional Science Program, National Science Foundation (NSF)
- 1995- Co-director (elected), Chinese Pollen Database Working Group, Beijing

- 1988-96 Member, U.S. National Committee for the International Union for Quaternary Research (USNC/INQUA)--appointed by the National Academy of Sciences; two consecutive 4-year terms
- 1991-93 Member (elected), Board of Directors, Biogeography Specialty Group, Association of American Geographers (AAG)

J. Honors and Prizes Received

- 2008- Elected AAAS Fellow
(honored for “pioneering research on geologic evidence of hurricane recurrence frequencies and for improved understanding of climate change in Andean and Tibetan high mountain environments”)
- 2008 LSU “Rainmaker” (named for being one of the year’s top 100 research and creative faculty at LSU)
- 2004 Recipient of LSU Distinguished Faculty Award (university-wide)
- 2001 Recipient of LSU Tiger Athletic Foundation Undergraduate Teaching Award (university-wide)
- 1994- Listed in *Who's Who in America, Who's Who in the World, Men of Achievement*
- 1992- Listed in *Who's Who in Science and Engineering, Who's Who in American Education, Who's Who among Young American Professionals, Who's Who in the South and Southwest*
- 1988 Nominee, Alan T. Waterman Award, NSF
- 1983 Warren Nystrom Award, Association of American Geographers

THESES/DISSERTATIONS DIRECTED (AS MAJOR PROFESSOR)

- Ph.D. Graduates (9): Jason Knowles (2008); Lawrence Kiage (2007); Carl A. Reese (2003); Caiming Shen (2003); Zuju Yao (2000); Andrew Maxwell (1999); Miriam Fearn (1995); Xu Li (1994); Hong-lie Qiu (1994)
- M.Sc. Graduates (10): Yun Huang (2009), Jennifer Hathorn (2008), Tom Bianchette (2007), Jason Knowles (2004), Carl A. Reese (2000); Xinyu Zhou (1998); Linda Pace (1998); Karen Thomas (1996); Kari Gathen (1994); Chris Coggins (1991)
- Current students (4): Terry McCloskey (PhD), Tom Bianchette (PhD), Devyani Kar (PhD), Qiang Yao (PhD)

TEACHING (at LSU):

Teaching Award

Recipient of LSU Tiger Athletic Foundation Undergraduate Teaching Award in 2001

Teaching Recognition

I was twice recognized in 1998 and 2002 by the *Alpha Lambda Delta Freshman Honor Society* for “Dedication to instruction of freshman students”.

Regular courses

Oceanography & Coastal Sciences (Teaching load: one course per semester):

OCS 3200 – Hurricanes and Typhoons

OCS/ENVS 4600 – Global Environmental Change: Past, Present, and Future

OCS 7001 – Global Change in the Quaternary

Geography & Anthropology (Teaching load: 2 courses per semester):

GEOG 2051 -- Physical Geography: Land & Water Surfaces, Plant and Animal Realms

GEOG 4082 -- Biogeography

GEOG/ANTH 4083 -- Quaternary Paleoecology

GEOG 7917/7921 -- Advanced Physical Geography (Graduate Seminar)

Topics taught: Quaternary Paleoenvironmental Reconstruction (2004)

Hurricanes: Climate and Society (2002)

Paleoecological Perspectives in Global Environmental Change (2000)

Cultural Palynology (1996)

Quaternary Paleoclimate and Vegetation History (1995)

Cultural Palynology (1993)

Ad hoc courses (Taught occasionally)

GEOG 4070 -- Environmental Conservation

GEOG 4085 -- Tropical and Subtropical Biogeography

GEOG 7921 -- Research and Independent Studies

GEOG 7901 -- Introduction to Graduate Studies

GEOG 2061 -- Physical Geography