HONG YANG, Ph.D.

William and Flora Hewlett Foundation Fellow
Harvard Radcliffe Institute for Advanced Study
Harvard University
&
Vice President and Charles J. Smiley Professor of Environmental Sciences
Bryant University
PHONE#: (401) 232 6223, FAX# (401) 232 6319, EMAIL: hyang@bryant.edu

EDUCATION

Postdoctoral Training, Molecular Biology and Genetics, University of Michigan at Ann Arbor, 1998
Ph.D. Geology (with high honors), University of Idaho, 1993
M.S. Botany and Paleobotany, China University of Geosciences at Beijing, 1988
B.S. Earth Science (with honors), China University of Geosciences at Wuhan, 1995

PROFESSIONAL EXPERIENCE

Inaugural Vice President for International Affairs, Bryant University, (2012-)
Executive Program in Leadership (Certificate), Stanford Graduate School of Business, Stanford University, Class 2012
Charles Jack Smiley Chair Professorship, Bryant University (2010-)
Executive Management Program (Certificate), School of Education, Harvard University, 2009
Full Professor (2009-), Associate Professor (2004), Assistant Professor (1998), Bryant University
Co-director, Laboratory for Terrestrial Environments, Bryant University (2008-)
Visiting (Research) Professor, Department of Geology & Geophysics, Yale University (2004-2005)
Visiting (Research) Professor, Department of Geological Sciences, Brown University (2001-2004)
Postdoctoral Research Associate, Department of Human Genetics, School of Medicine, University of Michigan at Ann Arbor (1995-1998)
Alfred P. Sloan Postdoctoral Fellow in Molecular Biology and Evolution, Department of Biological Sciences, Wayne State University (1993-1995)

SELECTED LIST OF FELLOWSHIPS/AWARDS/HONORS

Total 25 international, national, and university fellowships, awards, and honors

Radcliffe Fellow, Harvard University, named 2022
Fellow, Geological Society of America (GSA), elected 2019
Presidential Fellow, Association of International Education Administrators (AIEA), elected 2014
Public Intellectual Fellow, National Committee on U.S.-China Relations, selected 2005
Fellow, K.C. Wong Education Foundation, named 1998
Mogao Lecture, Dunhuang Academy, 2017
Bryant University Research and Publication Award, Bryant University, twice in 2001 and 2009
Bryant University Distinguished Faculty Award, Bryant University, 2006
Young Investigator Award, National Science Foundation of China (NSFC), 2001-2003

Postdoctoral Fellow, Alfred P. Sloan Foundation, elected 1993
Diana A. Haynes Graduate Endowment Award, University of Idaho, 1993
Outstanding Geologist Award for Ph.D. Degree, University of Idaho, 1993
AAAS Sunshine Mining Company Award for Excellence in the Geosciences, AAAS, 1991
The First Canadian Paleontology Conference, Best Student Paper Award, 1991

RESEARCH INTERESTS

(1) Investigate evidence, forcing, and impact of terrestrial climate change using state-of-the-art molecular carbon and hydrogen isotopes from modern and fossil plants and terrestrial sediments (e.g., Yang and Huang, 2003; Liu, Yang et al., 2005; Liu and Yang, 2008; Yang et al., 2009; Leng et al., 2010; Liu et al., 2011; Yang et al., 2011; Xiao et al., 2013; Liu et al., 2015; Yao et al., 2015; Liu et al., 2016, Liu et al., 2016; Li et al. 2016; Liu et al., 2018; Yang and Leng, 2018; Lu et al., 2019; Liu et al., 2019; Höfig et al., 2021; Liang et al., 2022; Lu et al., 2022). (Funded by NASA, NSF, and the National Natural Science Foundation of China).

(2) Study the evolution of terrestrial ecosystems, particularly plant community changes during Mesozoic and Cenozoic through fossil records of both North America and Asia, including *Metasequoia* floral change and impact on the management of endangered plant species (Yang, 1999; Leng and Yang 2001; Leng, Yang et al., 2001; Yang and Jin 2000; Yang and Hickey, 2007; LePage, Williams, and Yang, 2005; Yang et al., 2010; Noshiro et al, 2010; Liang et al., 2022). (Funded by American Chemical Society PRF-SRF, the National Science Foundation of China).

(3) Examine the process, mechanism, and impact of organic decay and its implication in environmental impact and fossilization, ranging from biomolecules to fossil coloration (Leng and Yang, 2003; Yang, 2005; Yang et al 2005, 2007; Gupta et al., 2007, 2009; Witkowski et al., 2012; McNamara et al., 2013; Gupta et al., 2014; Xiao et al., 2015; Wang et al., 2017; Witkowski et al., 2022) (Supported by an American Chemical Society PRF-SRF; NSF, and NASA EPSCoR-RID).

(4) Explore environmental changes and early civilization, characterizing ancient biomolecules ranging from DNA to lipids from archeological and paleontological material (Yang, 1997a, 1997b; Yang et al., 1996, 1997, 2006; Gupta et al., 2013; Yuan et al., 2013; Patalano et al., 2015; Patalano et al., 2022; Wang et al., 2023). (Funded by C. J. Smiley Chair Professorship Endowment Research Grant).

(5) Pedagogical research on experiential learning in climate change, international education, and scientific communication with the public (e.g., Yang, 1997, 2001; Yang and Leng, 2018) (Funded through AIEA, Lingnan Foundation, National Committee on US-China Relations, and NSF).

INVITED LECTURES AND SEMINARS

Total 75 invited public lectures on various topics in more than 10 countries

SELECTED PUBLICATIONS

3 edited books and over 100 scientific articles. Peer reviewed articles for past 3 years (*Corresponding author)

2023 Huanye Wang, Weiguo Liu, Qin Leng, Lin Yang, Hui Zhao, Jun Yang, Yuwei Chen, Shangbin Xiao, Yunning Cao, Jing Hu, Xiaoke Qiang, Peng Cheng, Hua Du, **Hong Yang***, 2000 years of lake-level fluctuations and human adaptation around China's largest freshwater lake. ***Palaeoecology, Palaeoclimate, and Palaeoenvironment*** 612:111397, (https://doi.org/10.1016/j.palaeo.2023.111397),

2022 Patalano, R.*, Hu, J., Leng, Q., Liu, W., Wang, H., Roberts, P., Storozum, M., Yang, L., and **Yang, H.,*** "Ancient Great Wall Building Materials Reveal Environmental Changes Associated with Oases in Northwestern China. ***Scientific Reports*, 12:22517, DOI:** 10.1038/s41598-022-27071-4. Open access (https://www.nature.com/articles/s41598-022-27071-4)

2022 Lu, H., Liu*, W., **Yang*, H**., Liu, Z., Leng, Q., Cao, Y., Hu, J., Sheng, W., Wang, H., Wang, Z., Sun, Y., Zhou, W., & An, Z., Decoupled land and ocean temperature trends in the early-middle Pleistocene. Submitted to ***Geophysical Research Letters***, open access: **https://doi.org/10.1029/2022GL099520**

2022 Liang, Jia-qi, Leng, Q., Xiao, Liang, Höfig, D.F., Royer, D. L., Zhang, Yi Ge, **Yang, Hong,*** Early Miocene redwood fossils from Inner Mongolia: CO_2 reconstruction and paleoclimate effects of a low Mongolian plateau. ***Review of Palaeobotany and Palynology***, 305:104743, Open access (https://doi.org/10.1016/j.revpalbo.2022.104743).

2022 Witkowski, C.R., Leng, Q., Reid, C.W., Feng, L., **Yang, H.,*** Tissue decay tested in modern *Metasequoia* leaves: Implications for early diagenesis of leaves in fossil *Lagerstätten*. ***Review of Palaeobotany and Palynology***, 304:104720, Open access (https://doi.org/10.1016/j.revpalbo.2022.104720).

2022 Liang, J-q, Leng, Q., Höfig, D.F., Niu, G., Wang, L., Burke, K., Xiao, L., Zhang, Y.G., Royer, D., **Yang, H.,*** Constraining physiological parameters in living and fossil conifer species: Towards improving performance of the leaf gas exchange model for ancient CO_2 reconstruction. ***Global and Planetary Change***, Open access (https://doi.org/10.1016/j.gloplacha.2022.103737).

2021 Höfig, D., Yi Ge Zhang, Liviu Giosan, Qin Leng, Jiaqi Liang, Mengxiao Wu, Brent Miller, **Hong Yang***, Annually resolved sediments in the classic Clarkia lacustrine deposits (Idaho, USA) during the middle Miocene Climatic Optimum. ***Geology***, 49:916-920. https://doi.org/10.1130/G48901.1.

2019 Weiguo Liu, Huanye Wang, Qin Leng, Hu Liu, Huan Zhang, Meng Xing Yunning Cao, **Hong Yang***, Hydrogen isotopic compositions along a precipitation gradient of Chinese Loess Plateau: Critical roles of precipitation/evaporation and vegetation change as controls for leaf wax δD. ***Chemical Geology,*** 528 (https://doi.org/10.1016/j.chemgeo.2019.119278.

2019 Lu, H., Liu, W., **Yang**, **H***., Wang, H., Liu, Z., Leng, Q., Sun, Y., Zhou, W., & An, Z., 800 kyr Land Temperature Variations Modulated by Vegetation Changes on Chinese Loess Plateau. ***Nature Communications***, 10:1958 |https://doi.org/10.1038/s41467-019-09978-1. (Open Access) https://www.nature.com/articles/s41467-019-09978-1.