

FENG SHENG HU

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EDUCATION

- 1996 Postdoctoral Training, Paleorecords of Global Change, University of Minnesota
- 1994 Ph.D., Ecosystem Science, University of Washington
- 1990 M.S., Botany and Quaternary Studies, University of Maine
- 1983 B.S., Biology, Xiamen University, PR China

PROFESSIONAL EXPERIENCE

- 8/15-present Associate Dean, Biological, Chemical, Physical and Mathematical Sciences, College of Liberal Arts and Sciences, University of Illinois
- 8/14-7/15 Interim Associate Dean, College of Liberal Arts and Sciences, University of Illinois
- 10/08-7/14 Head, Department of Plant Biology, University of Illinois
- 8/14-present Ralph E. Grim Professor, Department of Geology, U. Illinois
- 8/07-present Full Professor, Department of Plant Biology; Department of Geology; Program in Ecology, Evolution and Conservation Biology; U. Illinois
- 5/11-present Honorary Professor, Shanghai Jiao Tong University, P.R. China
- 8/02-7/07 Associate Professor, Department of Plant Biology; Department of Geology; Program in Ecology, Evolution and Conservation Biology
- 8/98-7/02 Assistant Professor, Department of Plant Biology; Department of Geology; Program in Ecology, Evolution and Conservation Biology; Environmental Council; U. Illinois
- 9/96-7/98 Research Associate and Lecturer, Department of Geology & Geophysics, Department of Ecology, Evolution, & Behavior, and Limnological Research Center, U. Minnesota.
- 9/94-8/96 Postdoctoral Fellow, NSF Research Training Group on Paleorecords of Global Change, U. Minnesota.
- 6/90-8/94 Predoctoral Research Associate, College of Forest Resources and Quaternary Research Center, U. Washington

HONORS, AWARDS, AND PROFESSIONAL RECOGNITION

- Ralph E. Grim Endowed Professor, University of Illinois, 2014-
- Academic Leadership Fellow, Committee on Institutional Cooperation (Academic Consortium of the Big Ten Universities and the University of Chicago), 2012-2013
- Invitation Fellow, Japan Society for the Promotion of Science (hosted by Nagoya University), 2011-2012
- Fellow, American Association for the Advancement of Science, 2008
- Arnold O. Beckman Research Award, University of Illinois, 2008

Fulbright Research Scholar, France (hosted by INRA - UMR1202 Biodiversité, Gènes & Communautés), 2006-2007
 University Scholar, University of Illinois, 2005-2008 (among six faculty members annually recognized for outstanding research and teaching)
 Center for Advanced Study Fellow, University of Illinois, 2002-2003
 Frontiers of Science Symposium Invitee (= current “Kavli Fellow”), National Academy of Sciences, 2001
 List of Teachers Ranked Excellent by Their Students, University of Illinois, 2000, 2005
 Packard Fellow in Science and Engineering, 2000-2005 (recognized as one of the nation’s 24 “most promising early-career scientists and engineers” in 2000)
 Chair and Chair-Elect, Paleoecology Section, Ecological Society of America, 1996-1998
 Postdoctoral Fellow, NSF Research Training Group, University of Minnesota, 1994-1996
 Xi Sigma Pi, National Forestry Honor Society, University of Washington, 1992
 Associate Editor:
Frontiers in Ecology and the Environment (2015-present)
Ecology (2008-present)
Ecological Monographs (2008-present)
Ecological Applications (guest editor)
Ecosystems (2012-2015)
Geology (1998-2000)

SELECTED PUBLICATIONS (total: 110; * = student/postdoc as lead author)

- *Chipman, M.C., Kling, G.W., Lundstrom, C.C., and **Hu, F.S.** 2016. Multiple episodes of thermo-erosion during the past six millennia: implications for the response of Arctic permafrost to climate change. *Geology*: doi:10.1130/G37693.1.
- *Kelly, R., Genet, H., McGuire, A.D., and **Hu, F.S.** 2016. Paleodata-informed modeling of large carbon losses from recent burning of boreal forests. *Nature Climate Change* 6: 79-82. (Cover page article)
- Hu, F.S.**, Higuera, P.E., Duffy, P., Chipman, M.L., Rocha, A.V., Young, A.M., Kelly, R., and Dietze, M.C. 2015. Tundra fires in the Arctic: natural variability and responses to climate change. *Frontiers in Ecology and the Environment* 13: 369-377. (Highlighted on cover page)
- *Urban, M, Nelson, D.M., Verschuren, D., Street-Perrott, A., and **Hu, F.S.** 2015. A late-Quaternary perspective on climate, $p\text{CO}_2$, and fire as alternative drivers of C_4 -grass abundance. *Ecology* 96: 642-653.
- *Kelly, R., Chipman, M.L., Higuera, P.E., Stefanova, V., Brubaker, L.B., and **Hu, F.S.** 2013. Recent burning of boreal forests exceeds fire regime limits of the past 10,000 years. *Proceedings of the National Academy of Sciences USA* 32: 13055-13060. (Featured as breaking news on the NSF homepage; recommended by Faculty of 1000; received extensive news media coverage).

- *Barrett, C., Kelly, R., Higuera, P.E., and **Hu, F.S.** 2013. Climatic and land-cover influences on the spatiotemporal dynamics of Holocene boreal fire regimes. *Ecology* 94: 389-402.
- *Clegg, B.F., Kelly, R., Clarke, G.H., Walker, I.R., and **Hu, F.S.** 2011. Nonlinear response of summer temperature to Holocene insolation forcing in Alaska. *Proceedings of the National Academy of Sciences USA* 108: 19299-19304.
- *Urban, M. A., *Nelson, D.M., Jiménez-Moreno, G., Châteauneuf, J-J., Pearson, A., and **Hu, F.S.** 2010. Isotopic evidence of C₄ grasses in southwestern Europe during the middle Miocene-early Oligocene. *Geology* 38: 1091-1094. (Editors' Choice, *Science* 333: 1725).
- Hu, F.S.**, Hampe, A., and Petit, R.J. 2009. Paleoecology meets genetics: Deciphering past vegetational dynamics. *Frontiers in Ecology and the Environment* 7: 371-379. (Highlighted on cover page)
- Kaufman, D.S. et al., and Arctic Lakes 2k Project Members including **Hu, F.S.** 2009. Recent warming reserves long-term arctic cooling. *Science* 325: 1236-1239.
- Marlon J.R. et al., including **Hu, F.S.** 2009. Wildfire responses to abrupt climate change in North America. *Proceedings of the National Academy of Sciences* 106: 2519-2524.
- *Higuera, P.E... and **Hu, F.S.** 2008. Fires in ancient shrub tundra: Implications of paleo-records for Arctic environmental change. *PLoS One* 3: e0001744. (Editors' Choice, *Science* 328: 586).
- *Nelson, D.M., and **Hu, F.S.** 2008. Patterns and drivers of Holocene vegetation change near the prairie-forest ecotone in Minnesota: revisiting McAndrews' transect. *New Phytologist* 179: 449-459.
- Petit, R.J., **Hu, F.S.**, and Dick, C.W. 2008. Forests of the past: A window to future changes. *Science* 320: 1450-1452.
- *Tinner, W... and **Hu, F.S.**, 2008. A 700-year paleoecological record of boreal-ecosystem responses to climatic variation from Alaska. *Ecology* 89: 729-743. (Editors' Choice, *Science* 328: 586).
- *Anderson, L.L., **Hu, F.S.**, Nelson, D.M., Petit, R.J., and Paige, K.N. 2006. Ice-age endurance: DNA evidence for a white spruce refugium in Alaska. *Proceedings of the National Academy of Sciences USA* 103: 12447-12450.
- *Gavin, D. G., **Hu, F.S.**, Lertzman, K, and Corbett, P. 2006. Weak climate control of stand-scale fire history during the late Holocene. *Ecology* 87: 1722-1732.
- *Nelson, D.M., **Hu, F.S.**, Tian, J., Stefanova, I., and Brown, T.A. 2004. Response of C₃ and C₄ plants to middle-Holocene climatic variation near the forest-prairie ecotone in Minnesota. *Proceedings of the National Academy of Sciences USA* 101: 562-567.

Hu, F.S. and 8 others. 2003. Cyclic variation and solar forcing of Holocene climate in the Alaskan subarctic. *Science* 301: 1890-1893.

Hu, F.S., Ito, E., Brown, T. A., Curry, B.B., and Engstrom, D.R. 2001. Pronounced climatic variations during the last two millennia in the Alaska Range. *Proceedings of the National Academy of Sciences USA* 98: 10552-10556.

Hu, F.S., and seven others. 1999. Abrupt climatic change in the North American midcontinent during early Holocene times. *Nature* 400: 437-440.

Keil, R., **Hu, F.S.**, Tsamakidis, E., and Hedges, J. 1994. Pollen in marine sediments as an indicator of oxidation of organic matter. *Nature* 369: 639-641.

RESEARCH FUNDING

25 grants from U.S. NSF, DOE, National Park Service, Fish and Wildlife Service, and the Packard Foundation since 1996

AWARDS TO GRADUATE STUDENTS IN HU'S RESEARCH GROUP

Robert Emerson Memorial Award, School of Integrative Biology, 2016, Melissa Chipman
Dissertation Completion Fellowship, University of Illinois, 2016-2017, Melissa Chipman
Best Presentation by a PhD student, Annual Research Symposium, Department of Plant Biology, University of Illinois, 2015, Denise Devotta

Edward S. Deevey Award, Ecological Society of America, 2014, Melissa Chipman

Robert Emerson Memorial Award, School of Integrative Biology, 2014, Ryan Kelly
Best Presentation by a PhD student, Annual Research Symposium, Program in Ecology, Evolution, and Conservation, 2014, Denise Devotta

NSF Graduate Research Fellowship, 2013-2016, Matias Fernandes

STAR Graduate Fellowship, U.S. Environmental Protection Agency, 2012-2015, Melissa Chipman

Dissertation Completion Fellowship, University of Illinois, 2013-2014, Mike Urban

Dissertation Completion Fellowship, University of Illinois, 2013-2014, Ryan Kelly

Best Graduate Research Presentation, Department of Plant Biology Fall Welcome, 2013, Denise Devotta

Edward S. Deevey Award (Winner), Ecological Society of America, 2012, Ryan Kelly

Edward S. Deevey Award (Runner-up), Ecological Society of America, 2012, Carolyn Barrett

Lebus Award (outstanding potential to succeed in chosen academic field), College of Liberal Arts and Sciences, University of Illinois, 2012, Ryan Kelly

Best Presentation by a PhD student, Annual Research Symposium, Department of Plant Biology, University of Illinois, 2011, Ryan Kelly

Best Presentation by a PhD student, Annual Research Symposium, Program in Ecology, Evolution, and Conservation, 2011, Ryan Kelly

Summer Research Opportunities Program Fellowship, 2011, Tahir Imbrahim (minority undergraduate student)

Outstanding Teaching Award, Department of Plant Biology, 2011, Carolyn Barrett
 Graduate College Dissertation Completion Fellowship, 2011, Carolyn Barrett
 Robert Emerson Research Award, School of Integrative Biology, 2011, Ben Clegg
 Graduate College Dissertation Completion Fellowship, 2009, Ben Clegg
 NSF GK-12 Teaching Fellowship, 2008, Ryan Kelly
 Best Overall Presentation, Program in Ecology and Evolutionary Biology Research
 Symposium, 2006, Lynn Anderson
 Best Presentation, Research Review of the Departments of Geology, Geography, and
 Atmospheric Sciences, 2006, Melissa Chipman
 Proctor and Gamble Research Award in Life Sciences, 2005, Lynn Anderson
 Ton Damman Award, Ecological Society of America, 2005, Paul Henne
 Graduate College Dissertation Completion Fellowship, 2005, Paul Henne
 Best Overall Presentation, Program in Ecology and Evolutionary Biology Research
 Symposium, 2005, Paul Henne
 Graduate College Dissertation Completion Fellowship, 2004, Lynn Anderson
 Graduate College Minority Fellowship, 2004-2006, Melissa Farmer
 Best Presentation by a Master's Student, Program in Ecology and Evolutionary Biology
 Research Symposium, 2002, Jeremy Hollis
 Edward S. Deevey Award, Ecological Society of America, 2002, Lynn Anderson

SELECTED SERVICE

Research Policy Committee, Office of the Vice Chancellor for Research, UIUC (2015-2017)
 Steering Committee, Data Science Institute Initiative, UIUC (2016-present)
 Facilities and Services Advisory Committee, Office of the Provost, UIUC (2015-present)
 Provost Designee, College of Medicine Transition Team, Office of the President, University of
 Illinois (2015-present)
 Campus Strategic Planning Retreat, Office of the Chancellor and Office of the Provost (2015)
 Executive Committee (Ex Officio), College of Liberal Arts and Sciences (2014-present)
 Board of Directors, UIUC Arboretum (2014-present)
 UIUC Internal Review Panel, NSF Program on Science and Technology Centers (STC), NSF
 Program on Partnerships for International Research and Education (PIRE), Office of Vice
 Chancellor for Research (2014)
 Research Equipment Review Committee, Office of Vice Chancellor for Research (2014)
 Campus Research Safety Council, Office of Vice Chancellor for Research (2014-present)
 Campus Research Administrators Working Group, Office of Vice Chancellor for Research
 (2014-present)
 Campus Budget Oversight Committee, Office of the Provost (2014-present)
 Packard Fellow Nominees Selection Committee, Office of the Vice Chancellor for Research
 (2013-14)
 Dean's Strategic Advisory (STAR) Committee, College of Liberal Arts and Sciences (2012-14)
 Chair and Member, University Scholars Selection Subcommittee for Biological and
 Environmental Sciences, Office of the Vice Chancellor for Research (2011-12)
Member, NSF Advisory Panel for the Population and Community Ecology Program, 2013
Member, Steering Committee, Planning for International Continental Drilling at Lake Challa,
 East Africa, 2012 - present

Member, U.S. National Committee for the International Union for Quaternary Research, National Academies of the United States, 2012 - present.

Co-Organizer, Session “Advancing High-Resolution, High-Throughput Paleocological Research,” The 13th International Palynological Congress and 9th International Organization of Palaeobotany Conference, Tokyo, Japan, 2012

Co-Organizer, International PAGES Workshop on Glacial Refugia and Biodiversity, Eugene, Oregon, 2012

Principal Organizer, INQUA session “Ecological Responses to Climatic Change at Centennial to Millennial Timescales: From Genes to Biomes,” International Quaternary Congress, Bern, Switzerland, 2011

External Evaluator, University of Nebraska; Harvard University; University of Alaska (2); University of Wisconsin, Madison; Lehigh University; College of Wooster; University of Helsinki (Finland); University of Vienna (Austria); Southern Illinois University; University of Victoria (Canada); University of Wyoming

NEWS MEDIA COVERAGE AND RESPONSE TO QUERIES ABOUT RESEARCH IN HU'S RESEARCH GROUP (INCLUDING INTERVIEWS BY HU'S GRADUATE STUDENTS)

New York Times, Los Angeles Times, The Washington Post, Scientific American, Science News, National Geographic, BBC, Kew Magazine, PBS Newshour with Jim Lehrer, NBC News, USA Today, San Francisco Chronicle, Environmental Health Perspectives, Conservation Magazine, New Scientist, Christian Science Monitor, Economic Times, Voice of America, Science Daily, United Press International, Chicago Sun-Times, Columbus Dispatch, Lincoln Courier, SitNews, Polar News, Inside Illinois, Champaign News-Gazette, Nature, Indian Times, The Guardian (UK), StarTribune (Minneapolis), Yale Environment 360, The Money Times, Canada Standard, St. Louis Globe-Democrat, ABC (Australian Broadcasting Corporation), Discovery Channel News, High Country News, Climate Central, Live Science, Canadian Geographic, ClimateWire, International Business News, Oregon Herald, Yahoo! News, Nature World News, CBC (Canadian Broadcasting Corporation), Alaska Dispatch, Fairbanks Daily News-Miner, NSF Home Page, Science360 (Breaking Story of July 25, 2013), Canadian Science Writer's Association, World Science Report, FrenchTribune, Newspoint Africa, StarTribune, Anchorage Daily News, Yukon News, Noticias de la Ciencia y la Tecnologia, Juneau Empire