

US-China Workshop In Geology and Paleontology
“CRITICAL TRANSITIONS IN HISTORY OF LIFE” (I)

Sponsored by
National Science Foundation (USA)
National Natural Science Foundation (China)

Saturday November 5 to Sunday November 6, 2005

Executive Conference Center
National Museum of Natural History (NMNH)
Smithsonian Institution

Saturday 11/05/05 Morning – Moderators: Z-X Luo & D. H. Erwin

Time	Speaker	Title/Contents (Tentative)
8:35-8:40AM	Douglas H. Erwin Smithsonian	Welcome On behalf of Smithsonian Institution Staff
8:40-8:45AM	Dr. Herman Zimmerman Division Director Earth Sciences Research NSF - US	Opening Remark (for National Science Foundation)
8:45-8:50	Dr. Zewei Lu Deputy Director Geosciences Department NSF-China	Opening Remark (for National Natural Science Foundation of China)
8:50-9:00AM	Zhe-Xi Luo Carnegie Museum	Introduction; meeting logistics; organizing subgroup sessions; acknowledging NSF-NSFC.
Critical Transition #1: Neoproterozoic and Early Cambrian		
9:00-9:20AM	Shuhai Xiao Virginia Tech	Animal and algal evolution of the Neoproterozoic
9:20-9:40AM	Maoyan Zhu Nanjing Institute	Neoproterozoic and Early Cambrian biostratigraphy
9:40-10:00AM	Roger Summons MIT	Late Neoproterozoic isotopic & organic geochemistry patterns and correlation to organismic evolution
10:00-10:20AM	Samuel Bowring MIT	High-precision geochronology & EARTHTime Initiative
10:20-10:40AM	All participants	Roundtable discussion: what else can be done through US- China collaboration on this critical transition?
10:40-11:00		Coffee Break

Critical Transition #2: Permo-Triassic Extinction and Recovery		
11:20-11:40AM	Douglas Erwin Nat. Mus. Natural History Smithsonian	Causes and consequences of the end-Permian mass extinction and biotic recovery
11:40AM-12:00	Shuzhong Shen Nanjing Institute of Geology & Palaeontology	High-resolution biostratigraphy and patterns of extinction across Permo-Triassic boundary
12:00-12:20PM	Xiangdong Wang Nanjing Institute of Geology & Palaeontology	Marine biotic reorganization in Tethys prior and post the Late Paleozoic glaciation
12:20-12:40PM	All participants	Roundtable discussion: what else can be done through US-China collaboration on P-T transition?
12:40-1:40PM		Lunch Break

Saturday 11/05/05 Afternoon – Moderators: Samuel A. Bowring & Xiangdong Wang

Critical Transition #3: Rise of Modern Terrestrial Biotas in Mesozoic		
1:40-2:00PM	Hans Sues Nat. Mus. Natural History	Triassic-Jurassic Transition in Terrestrial Faunas
2:00-2:20PM	Zhong-he Zhou Institute of Vertebrate Paleontology	The Yixian Ecosystem
2:20-2:40PM	Ge Sun Jilin University David Dilcher University of Florida	Early evolution of angiosperm plants and Early Cretaceous floras
2:40-3:00PM	Zhe-Xi Luo Carnegie Museum	Origins of extant mammalian groups: monotremes, marsupials and placentals
3:00-3:20PM	All Participants	Roundtable discussion: what else can be done through US-China collaboration on this critical transition?
3:20-3:40PM		Coffee Break

3:40-4:40PM	All participants	Sub-group session #1: preliminary organization Coordinators: Shuhai Xiao (Neoproterozoic-Cambrian) Shuzhong Shen (Permo-Triassic Transition) Zhe-Xi Luo (Mesozoic-Modern ecosystem evolution) Chris Beard (Paleocene-Eocene transition, etc) Arnold Miller (Database infrastructure)
5:00-7:00PM	Remarks Dr. Hans-Dieter Sues Associate Director of Science Nat. Mus. Natural History (Smithsonian) Dr. H. R. Lane & Dr. R. H. Nader (EAR, OISE of NSF) Dr. Yu Liu (NSF-China)	Social Reception Hors d'Oeuvres & Drinks (Lobby of Executive Conference Center)

Sunday 11/06/05 Morning – Moderators: Qun Yang & Chris Beard

Critical Transition #4: Evolution of Early Cenozoic Mammals and Climates		
8:40-9:00AM	Chris Beard Carnegie Museum	Transition of Mammalian Faunas across Paleocene-Eocene boundary
9:00-9:20AM	Xijun Ni Institute of Vertebrate Paleontology	Fossil Primate records from Asia and Primate Evolution
9:40-10:00AM	Paul Koch University of California Santa Cruz	Climate Evolution through Paleocene-Eocene transition and impact on mammalian biogeography
9:20-9:40AM	Jin Meng American Museum of Natural History	Eocene-Oligocene Transition and Grande Coupure
Critical Transition #5: Human Cultural Evolution and Pleistocene Climate Change		
10:20-10:40AM	Rick Potts Smithsonian	Paleolithic human cultural evolution in Eastern Asia
10:40-11:00AM	Hai Cheng University of Minnesota Twin City	Pleistocene climate evolution of Eastern Asia
11:20-11:40AM	All participants	Coffee and Roundtable discussion: what else can be done through US-China collaborative research on these topics?
Building Cyber and Database Infrastructure through US-China collaboration		

11:40-12:00	Arnold Miller University of Cincinnati	Paleobiology Database
12:00-12:20AM	Yue Wang Nanjing Institute of Geology and Palaeontology	Overview of paleontological databases in China and Late Paleozoic Database of NIGPAS Group
12:20AM-1:00PM	Cinzia Cervato Iowa State University	Chronos Database
1:00PM-1:40PM	Lunch Break	

1:40-2:00PM	Gerilyn Soreghan	Geosystems and Paleoclimate research
2:00-2:20PM	Timothy Rowe University of Texas Austin	Digimorph Database
2:20-2:40PM	Peter Sadler University of California Riverside	Models and methods in biostratigraphy
2:40-3:00PM	All participants	Roundtable discussion: how can database-research benefit from US-China collaborations?

Sunday 11/06/05 Afternoon – To be organized by coordinators of subgroup discussion

3:00-4:00PM	Preliminary Written Synthesis of the Following: A. Brief summary of notable advances in a given “critical transition” in China and the US in the last 10 years; B. Prospect for future progress or breakthrough in geology and paleontology in the US and China; C. How to facilitate further progress through collaboration? Final reports to be collated by email correspondence
Subgroup session #2	
Conference Adjourned 4:30PM, Nov. 6, 2005	

Other Activities:

In the evening of Sunday, November 6, 2006, Dr. and Mrs. Richard and Sherry Lane hosted a Texas barbecue dinner party for all Chinese participants of the workshop and some American colleagues at their residence in Washington, DC.