Short Curriculum Vita

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Relevant Experience:

Dr. Mark Helper has taught field geology for 25 years and conducted geological field research around the globe. He is co-chair of the Field Exploration and Analysis Team (FEAT), an organization of field-based geoscientists interested in assisting NASA in preparing astronauts for geological/geophysical investigations of the lunar surface. He has organized and chaired lunar and planetary technical meeting sessions for LEAG, GSA and AAPG, co-organized and led NASA field geology training exercises, was a member of the human exploration of Mars science advisory group (HEMSAG), and a science team member for a 2008 ARC-IRG operational readiness test that assessed geologic mapping capabilities of a K-10 rover and geologic EVA planning. He spent 1.5 weeks at Haughton crater in 2009 as a field geologist/collaborator and subject for two MMAMA field studies that are examining robotic follow-up to human exploration and analog pressurized rover-based science and exploration.

Education:

Ph.D., Geological Sciences, University of Texas at Austin (UTA), 1985
B.S., Geology, University of Illinois, 1978

Professional Experience:

2007-	Distinguished Senior Lecturer, Department of Geological Sciences, UTA
2000-2006	Senior Lecture, Department of Geological Sciences, UTA
1985-2000	Lecturer, Department of Geological Sciences, UTA

Recent Lunar Abstracts:

Schmitt, H.H., **Helper, M.A.**, Muehlberger, W., and Snoke, A.W., 2006, Field exploration science for a return to the Moon, Eos Trans, AGU, Fall Meet. Suppl., Invited Abstract U42B-01.

Choi, E.M., **Helper, M.A**. and Ghafoor, N., 2007, M.U.L.E. – A robotic field assistant for lunar astronauts, 11th Int. Space Univ. Ann. Symp.: "Why the Moon?"; Strasbourg, France.

Helper, M. A., Schmitt**,** H.H., Muehlberger, W.R., and Snoke, A.W. 2007, Astronaut geological training for lunar exploration, NASA Advisory Council Workshop on Science Associated with the Lunar Architecture, Tempe, AZ.

Helper, M.A, and Snoke, A.W., 2007, Field exploration and astronaut training activities and goals: The FEAT perspective. Invited, Lunar Exploration Analysis Group (LEAG) Biannual Meeting, Houston, TX.

Eppler, D.B, Feustel, A., Erickson, J.M., Hodges, K., Keszthelyi, L.P., **Helper, M.**, Muehlberger, W.R., Phinney, W., Snoke, A., and Tewksbury, B.J., 2008, Apollo/Constellation geologic training workshop: Reviewing Apollo's accomplishments and preparing a new generation of geologic explorers for lunar field geology, Geological Society of America Abstracts with Programs

J. E. Bleacher, **M.A. Helper**, C.R. Neal, G.R. Osinski, M.S. Robinson, C.K. Shearer, A.W. Snoke, P.D. Spudis, 2008, Lunar field geology and EVA planning based on science rationale, NASA Lunar Science Conference.

Snoke, A.W. and **Helper, M.A**., 2009, Field Exploration Analysis Team (FEAT): An Overview. American Association of Petroleum Geologist Annual Convention, Denver, CO

Deans, M.C., Broxton, M., Fong, T., **Helper, M**., Hodges, K.V., Schaber, G.G., Schmitt, H.H., and Smith, T., 2009, Planning Lunar Surface Traverses for Robotic Scouting Followed by Crew. Am. Assoc. Petrol. Geologist Annual Convention, Denver, CO.

Pacis, E., Hodges, K.V., Kobayashi, L., Bualat M., **Helper, M.**, Deans, M.C., Lee, P., Landis, R., Riley, S. and Fong, T., 2009, Robotic Scouting for Human Exploration. Am. Assoc. Petrol. Geologist Annual Convention, Denver, CO.