Wednesday, April 26, 2017 ASTROBIOLOGY AS A HUMAN ENDEAVOR: ASTROBIOLOGY EDUCATION AND PUBLIC OUTREACH: NNOVATIONS IN ASTROBIOLOGY TEACHING AND LEARNING II 1:30 p.m. Mesa Room

Chairs:	Christopher Impey Bruce Fouke
1:30 p.m.	Impey C. D. * Welcome and Introduction to Session "Innovations in Astrobiology Teaching and Learning"
1:45 p.m.	 Bratton D. D. III * Hayes J. Sarno D. Bruce G. Horodyskyj L. Mead C. Ben-Naim D. Anbar A. D. Bringing Active Field-Based Learning to Scale in Astrobiology: Virtual Field Trips and <u>Adaptive Courseware</u> [#3662] We present our work producing high-quality adaptive place-based science education online at scale and the results of research into effectiveness.
2:00 p.m.	Bonaccorsi R. * McKay C. P. Mogul R. Boston P. Willson D. Heldmann J. Baker L. Cowan D. Pandey S. Sharma M. Sun H. Blank J. G. Stoker C. R. Mogosanu I. H. Campbell K. A. Phartiyal B. Rask J. C. Clarke J. 2006–2016 SB Team <u>Spaceward Bound's 11-year History: To extreme environments on Earth and Beyond</u> [#3289] Since 2006, 29 successful Spaceward Bound field expeditions have been engaging STEM teachers working with NASA astrobiologists to study extremophiles worldwide.
2:15 p.m.	Scalice D. * Nadkarni N. Bush K. Trivett J. <u>Facilitating Transformations: Bringing Astrobiology to Incarcerated Populations</u> [#3435] A new collaborative team is bringing astrobiology, in the form of lectures and videos, to learners behind bars.
2:30 p.m.	Cockell C. S. * <u>Life Beyond — Astrobiology in Prisons for Science Education and Social Reform</u> [#3082] Life Beyond is a collaboration between the UK Centre for Astrobiology and the Scottish Prison Service (SPS) to take astrobiology into the prison environment.
2:45 p.m.	Djokic T. * Van Kranendonk M. J. Oliver C. Guan S. Ong A. <u>Astrobiology 'Down Under': A Comprehensive Virtual Field Trip of the c. 3.48 Ga Dresser Formation,</u> <u>Pilbara Craton, Western Australia.</u> [#3022] This study showcases a comprehensive virtual field trip of the c. 3.5 Ga Dresser Formation host to some of Earth's earliest convincing evidence for life.
3:00 p.m.	Kingsley I. * Oliver C. Van Kranendonk M. <u>Does the Way We Communicate Astrobiology Decrease Public Understanding of Astrobiology?</u> [#3053] This study suggests that how we are communicating astrobiology is misleading people's perception of science and decreasing understanding of scientific practice.
3:15 p.m.	Waldman A. * <u>The Most Empowering Form of Science Engagement: Play</u> [#3221] Through multidisciplinary experimentation, how we can change people's relationship with astrobiology, from observation to active contribution and participation.
3:30 p.m.	 Mogoşanu I. H. Campbell K. A. * Blank J. G. Paul K. P. Newton C. L. R. Tait E. H. Houghton K. Drake B. Rowe M. Gregory E. Spaceward Bound New Zealand for Youth 2017: A Pilot Expedition Using a Mātauranga Māori Approach to Teaching Astrobiology in New Zealand [#3409] Mātauranga Māori is the NZ's indigenous people system of knowledge tracing their ancestry in a process similar to the modern Big Bang.

3:45 p.m. Coffee Break