**Arctic Museum Collections – documenting and understanding changes in biological and cultural diversity through time and space**

**Draft Agenda**

***Introduction***

*Stefanie M. Ickert-Bond*

***Ethnobotany of Northwest Alaska: Preserving traditional knowledge and engaging Alaska native students in STEM.***

Sarah Betcher and Stefanie M. Ickert-Bond

***Cultural Exchanges: How UAMN cultural collections are increasing opportunities for shared knowledge and cultural persistence in Northern communities****.*

Angela Linn

***The UAMN Archaeology and Ethnology & History collections as archives of long-term cultural and environmental change in the Arctic.***

Josh Reuther, Angela Linn and Scott Shirar

***Using Arctos to manage the University of Alaska Museum’s rapidly growing genomic resources collection.***

Kyndall B.P. Hildebrandt and Link E. Olson

***Partnering with management agencies in the shared stewardship and scientific utilization of archived natural history specimens.***

Aren M. Gunderson, Dusty L. McDonald, Stephanie Stephens and Link E. Olson

***Alpine small mammals at the top of the world: specimen-based insights into past and ongoing responses to climate change.***

Link E. Olson, Kathryn M. Everson, Aren M. Gunderson, Kyndall B.P. Hildebrandt, Nicholas J. Kerhoulas, Hayley C. Lanier, and Catherine E. Rubin

***Producing, sharing, and using entomological data to document hyperdiversity of the changing North.***

Derek Sikes

***Collectively, we need to accelerate Arctic specimen sampling.***

Kevin Winker and Jack Withrow

***Baseline information, digitization and future directions and priorities for Arctic cryptogam research.***

Jordan Metzgar, Shawnee Gowan, Alan Friday, Lily R. Lewis, Juan Carlos Villarreal, Elise Biersma, Stuart McDaniel, Bernard Goffinet, Catherine Le Farge, Peter Convey, Stefanie Ickert-Bond

[***Mining the Museums in real-time: An example from the Open Access Herbarium, University of Alaska Museum, with Open Source Machine Learning algorithms and OpenGIS analysis.***](http://drive.google.com/open?id=1sXCpBIdr_gReeyiaPl05z79Dzl8tSnt9EMaB0azM-Po)

Falk Huettmann

***Museum collections bring authentic, place-based, data-driven education to students for tackling pressing Arctic issues: lessons learned from AIM-UP! and Teach GeoSTEM.***

Stefanie M. Ickert-Bond, Ute Kaden, Joseph A. Cook, Kailyn Davis, Patrick Druckenmiller, Scott Edwards, Sarah Fowell, Addie House, Eileen A. Lacey, Philip Patterson, and Alex Van Wyhe