

**Title: Contribution of Science to Indigenous Ecological Knowledge for Climate Change Adaptation at the Village Level**

**Hosts: Karim-Aly S. Kassam and David Wolfe**

**Date: January 20, 2015, 12:00-1:00 pm**

**Abstract:** How can indigenous ecological calendars, which are used to guide agricultural activity, be combined with scientific knowledge so that villagers can anticipate and respond to climate change? In the Pamir Mountains, spanning the Afghan-Tajik borders, small-scale farmers and herders are key food producers. Historically, they have used “calendars of the human body” to anticipate weather patterns and coordinate their activities with natural events and seasonal cycles. These calendars guide agricultural practice according to key weather and biological indicators, like first budding of a certain plant, emergence of an insect or bird, and last day of snowcover. These calendars vary from valley to valley, and are well tuned to varying environmental conditions. As such, the calendars are an example of indigenous ecological knowledge, a complex, transdisciplinary, place-based, empirically grounded, and action-oriented way of understanding the world. For centuries, these calendars enabled the people of the Pamir Mountains to adapt to variability and change in climate. In the last century, calendars of the human body were suppressed by Soviet authorities and many fell out of use. This means that the calendars were not updated as the climate changed. What contributions can you make to collaboratively realign and apply these calendars under current climate conditions?