

## Nishma DAHAL, India



Nishma comes from a small eastern Himalayan state of India, Sikkim. Having spent most of her childhood in such biodiverse landscape brought her closer to nature. She travelled across Indian and Nepal Himalaya looking for pikas. Beautiful landscape and friendly people kept her going despite the challenges faced during field work. Here she describes her research:

“Himalaya is a geographically fascinating place, with high biodiversity, poised to face substantial climatic change. The dynamic history of the landscape interests me to understand the colonization pattern of high-altitude specialist small mammals (*Ochotona spp.* commonly known as Pikas) in the Himalaya. Pikas usually inhabit high elevations or high latitudes. As the climate warms, models predict that region that lies close to the tropics, but at high elevations will experience the most dramatic climatic changes. It is worth exploring the impacts of climate warming in these high altitude specialists by contrasting the impacts of past climatic fluctuations on the demography of these high altitude specialist mammals that have pan- Himalaya distribution. Therefore, I am interested in the evolutionary history of the Himalayan Pika species, and their response to past and future climatic fluctuation.

Being part of World Lagomorph Society has helped me in terms of collaboration and encouragement. The Lagomorph experts showing interest in my work is very encouraging. I thank Lagomorph society for providing travel support this year. “

## Narayan KOJU, Nepal



Narayan is doing research on pika (*Ochotona*) phylogeny and biogeography. He is also interested in behavior, population abundance and study on climate change vulnerability on Himalayan pikas. Here he describes his focus:

“My recent research focus southwest of China. China is hotspot for pika research. It harbors 25 species of pikas out of 28 valid species and more than 50% among them are endemic to China. During this research our team explored one possible new sub genus of the genus *Ochotona*. We also get success to reveal underestimated species diversity (three new putative species) and inter-specific gene flow in southwestern China by multilocus approaches.

We are using both mitochondrial DNA and nuclear DNA for inferring the phylogenetic relation between pika species. Two mtDNA and five nDNA loci are sequenced. Our divergence time estimation support Leporidae and Ochotonidae was diversified in the early Eocene Epoch. It also suggests the subgenera origination was during a relatively short period at approximately 13.90 Ma, the time concurrent with accelerated uplift of Himalaya. In this ongoing research we used 96 samples of pika from 23 locations of five different countries. In future we are doing further molecular and morphometric analysis for robust result. “