

Mapping and comparing vegetation properties in Himalayan versus Trans-Himalayan  
treeline ecotone using Unmanned Aerial Systems

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**Budget Justification**

The following provides justification for the corresponding items provided in the attached budget.

**A1. PI/PDs and Co-PIs:**

Funding is requested for \$5000 salary for the PI, as compensation for working on the proposed project during the months of June-August, 2016.

**B2. Undergraduate Students:**

Undergraduate student is applying for grant support from the UWL undergraduate research and creativity grant.

**E1. Travel:**

Travel cost for field work within Nepal includes vehicle rental (or use of public transport), gas, food, accommodation (where not camping). In Kathmandu, accommodation/food will be in hotel (total 4 days x 80 per day=**\$320**). It is anticipated that the two field sites (in eastern and central Nepal) will be sampled within 21-day period as the second field site will require returning to the capital Kathmandu to resupply before leaving for the second field site. During field work in mountain area the accommodation will be in tents with self-cooked meals. Groceries will be purchased in advance from Kathmandu. To carry the camping gear and groceries during field work/trek, four porters will be hired along with a mountain guide who will be a key personal forensuring safety and handling logistics such as securing research permits from governmental departments, purchase of groceries and managing porters. The cover the cost of mountain guide **\$420** (\$30/per day x 14 days) and porters **\$840** (\$20 per day x 3 porters x 14 days) is requested. To cover the modest grocery cost of this team for 14 days, **\$700** is requested. Also, for the air ticket cost of traveling from La Crosse to Kathmandu, Nepal + airline baggage fee for equipment (e.g. Two drones + accessories such as spare batteries, chargers, drone camera units, GPS units, rangefinders) **\$3300** is requested.

**F1. Materials, equipment less than \$1000 and supplies**

To obtain Drone flying permit, fees is charged by the Nepal Aviation authority, Government

of Nepal (200 per flight location x 2 locations= **\$400**)