**ECOHEALTH ALLIANCE BUDGET JUSTIFICATION**

**A. Key personnel:**

The PD/PI, Dr. Peter Daszak, will commit 1.5 months per year in each year of this budget. He will be primarily responsible for overseeing the project, general management, communication and collaboration with subawardees, as well as contributing to data analysis and manuscript writing.

Senior/Key Personnel, Dr. Epstein, will commit 2 months per year. Dr. Epstein will lead the design and implementation of the bat epidemiology fieldwork; supervise field teams, lab data analyses as well as conduct field training. He will participate in regular conference calls, help with data analysis, and draft manuscripts.

Senior/Key Personnel, Dr. Olival, will commit 3 months per year. Dr. Olival will direct the bat population genetics work, assist with data analyses, and manuscript writing. He will also advise on the modeling and provide training for field teams.

Senior/Key Personnel, Dr. Hosseini, will commit 2 months per year. Dr. Hosseini will perform spatial analyses and data mapping in collaboration with of Dr. Epstein and Dr. Olival.

**B. Other Personnel**

A Research Scientist will be hired at 12 months time per year to provide direct assistance and oversight of all field and laboratory activities in China; ensure shipment of equipment from EcoHealth Alliance Headquarters; maintain equipment and logistics; and coordinate animal and human sample shipment to the labs in China. This person will be based at EcoHealth Alliance, but will spend significant time in the field in China.

A Program Coordinator, Mr. Aleksei Chmura, will commit 2 months time per year to provide program. Mr Chmura will coordinate regular calls, reports, maintain EcoHealth Alliance and subawardee budgets and both project and financial reporting, draft subcontracts, and set-up project databases, advise field activities, and assist with statistical analysis.

For all EcoHealth Alliance personnel that will have salary covered by this grant, we have included the EcoHealth Alliance 5% per annum increase in salary.

Fringe benefits for Year 1 are calculated for EcoHealth Alliance’s federally approved rate of 32.3% of base salary with annual increase of 1.0% in all subsequent years.

**C. Equipment**

No Equipment costing more than $5,000 will be purchased

**D. Travel**

*Domestic Travel*

$3,605 is requested annually for Years 1 through 5 for the PD/PI and 4 Senior Personnel to attend and present on research results at the annual American Society for Tropical Medicine and Hygiene meetings. 2 night and 3 day travel is calculated as follows: $205 for hotels ($410 x 5 = $2,050); $71 for meals and incidentals ($213 x 5 = $1,065); and $98 for round-trip train ($98 x 5 = $490).

*International Travel*

$32,313 is requested annually in Years 1 to 5. This will support round-trip flights from New York to Shanghai or Guangzhou for the field annual meetings for 3 Senior/Key Personnel and 1 for the PD/PI (Daszak) at $2,200 each. Five nights and six days of hotels, meals, and incidentals for 3 Senior/Key Personal and 1 PD/PI are calculated at $5,636 per year: hotels at $169 per night (x 5 nights and 4 personnel = $3,380) and meals and incidentals at $94 per day (x 6 days and 4 personnel = $2,256).

One of the Senior/Key personnel (Dr. Olival) will travel to China for two field training and supervising visits per year for duration of 2 weeks each. Support for this requested annually at $7,552 and is calculated as follows: 2 round trip flights = $4,400; hotel $169 x 14 nights x twice a year = $4,732; meals and incidentals at $94 per day x 15 days x twice a year = $2,820

In each year, two of our Chinese collaborating partners’ scientists including the co-Investigators will come to EcoHealth Alliance headquarters either to attend the annual American Society for Tropical Medicine and Hygiene meetings or to conference with EcoHealth Alliance and other partners and consultants. We request $5,925 to support these four-night, five-day round-trip visits from China and calculate this as follows: two round-trip flights from Shanghai, Guangzhou, or Beijing to USA = $4400; USA hotel at $137 per night x 2 trips x 4 nights per trip = $1,096; per diem of $42.5 x 2 trips x 5 days per trip = $430.

**E. Participant/Trainee Support Costs**

There are no participant/trainee support costs.

**F. Other Direct Costs**

*Materials & Supplies*

We request $14,400 in Year 1 for sample collection materials to be shipped to China including bat catching equipment ($1,000); PPE ($7,000) syringes, tubes, and reagents ($3,400); and 1 liquid nitrogen dry shipper ($3,000) for Yunnan CDC in China.

In Year 2 field sampling will be completely underway, so we request $18,250 to support 1 liquid nitrogen dry shipper ($3,000) for Shanghai CDC in China; PPE ($7,000) syringes, tubes, and reagents ($3,400); and bat catching equipment ($1,000).

In Years 3 and 4 field sampling efforts will decrease but human sampling continue, so we only request support for PPE ($2,250 in Year 3 and $2,000 in Year 4). We request $4,000 per year in Years 3 and 4 for lab reagents to complete population genetics tests.

In Year 5 we request only $2,500 to cover PPE and additional, final field costs.

*Publication Costs*

We request $2,600 per year for only Years 2 to 5 for publication fees required to publish research findings in peer-reviewed journals such as *Public Library of Science*.

*Subawards/Consortium/Contractual Costs*

We are requesting consortium/contractual support for our two partners: East China Normal University and Wuhan Institute of Virology. We have fully detailed these direct and indirect costs in the Research and Related Subaward Budget Attachment Forms.

*Local Reimbursements*

Once all permits are in place in Years 2 to 4, technician-consultants trained in phlebotomy and employed by EcoHealth Alliance partners at provincial China CDCs will conduct interviews as part of the human wildlife contact survey as well as collect blood samples from volunteers in animal markets. No funds are requested to support these technician-consultants, since their respective institutions will support them. Shipping and maintenance of cold-chain from provincial areas to Wuhan Institute of Virology are already supported in the funding requests for our subwardees: East China Normal University and Wuhan Institute of Virology. We will provide reimbursement for the technician-consultant’s allowable room/transportation/food costs that are expected to average monthly at food ($24.50), room ($25), and transportation ($56): $105.50 x 3 technicians x 3 months = $950 per year. In year 5 sampling will have ended, but partial support is requested for only two technician-consultants at $550.

*Computers, Software, and Reference Materials*

We request support of $6,000 to permit the Research Scientist and Dr. Olival to purchase 1 laptop each (2 x $3,000 including insurance and software). We also request $1,000 per year in each year to cover software and reference materials.

*Shipping and Communications*

We will be shipping the materials and supplies detailed above to our subawardees in China. Shipping box and all taxes are estimated at $833.33 per shipment. We estimate 6 shipments of equipment will be sent in Years 1 and 2. Year 3 only 3 shipments are estimated. Three (3) more shipments are expected over years 4 and 5, so costs are apportioned evenly across these years. We are requesting $5,000 per year to support communications for the Research Scientist, Dr. Guangjian Zhu, Dr. Olival, and Dr. Epstein while traveling in China. We calculate this as follows: 12-months international telephone charges or calling cards ($435); wireless card for handphone ($76.80); annual Skype access ($30); annual Internet WiFi access ($240), 1-year Go-To-Meetings account ($468) to be purchased respectively for Wuhan, East China Normal University, Yunnan CDC, and Guangdong CDC representatives.

**H. Indirect Costs**

We are requesting the EcoHealth Alliance federally approved indirect cost rate of 44.1% on all applicable direct costs. Indirect is taken only on the first $25,000 for each consortium/contractual agreement in each year. As there are 2 (one to Wuhan Institute of Virology and the other to East China Normal University), a total of $22,050 ($11,025 x 2) is requested as indirect costs on consortium/contractual/subaward agreements. This is not included as part of direct cost calculations.