

**CONSORTIUM/CONTRACTUAL ARRANGEMENTS:**

This project is a multi-institutional collaboration led by EcoHealth Alliance, New York (Daszak, PI), which will subcontract funds to three institutions: the Wuhan Institute of Virology (Dr. Shi), the University of North Carolina at Chapel Hill (Dr. Baric), and the Institute of Pathogen Biology (Dr. Ren). In addition, Dr. Linfa Wang from Duke-National University of Singapore (Duke NUS) will act as a senior consultant with no requested subcontract funds, and will primarily advise on the serological and molecular based diagnostic platforms. Dr. Daszak has over 15 years previous experience managing collaborative projects including two R01s on Nipah virus ecology and the current R01 on Coronavirus (AI110964) that involve multiple, separate foreign institutions; a 5-year NSF/NIH Ecology of Infectious Disease award on West Nile virus which involved multiple subcontracts, a NIAID R01 on bat viral discovery that involved multiple international contracts, and a multi-million dollar per year contract from USAID that involves 21 international partners. The applicant organization (EcoHealth Alliance) is justified in taking the lead on this project because it specializes in understanding the ecological, and virological processes underlying zoonotic disease emergence. Dr. Daszak has conducted significant preliminary work on this issue including 15-years of research on the ecological and related factors of the emergence of SARS and 15-years of work in China. The subcontract institutions will work on specific issues and areas in which they have proven expertise. These areas are:

- Human community surveillance, human clinical or hospital syndromic surveillance, CoV serology, full genome sequencing, epidemiology, and behavioral risk (Institute of Pathogen Biology, Dr. Ren)
- CoV screening and serology of non-human samples, viral pathogenesis, serological testing protocol development, host receptor binding, S protein sequencing, *in vitro* and *in vivo* virus characterization (Wuhan Institute of Virology, Dr. Shi)
- Small animal models of viral pathogenesis, primary human cell cultures, CoV reverse genetics, reconstruction of zoonotic CoV (University of North Carolina at Chapel Hill, Dr. Baric).

Dr. Daszak has had inter-institutional contractual agreements with the Wuhan Institute of Virology for over 13 years. Drs. Shi and Daszak have collaborated together since 2002 and have been involved in running joint conferences, collaborating on papers, and shipping samples into and out of China. Drs. Baric, Shi, Wang, and Daszak have collaborated closely for over 10 years on Coronavirus and other emerging disease research. Drs. Shi and Ren have collaborated on viral discovery projects 8 years.