## Project Title: Defining the Kenyan cheetah on a genetic level, and the potential for naturally occurring subspecies hybridization

Genetics play a crucial role in understanding the genetic diversity, population structure, and connectivity of the rapidly declining cheetah population. With just around 7,500 mature individuals left worldwide, cheetahs are facing the threat of extinction. They are found in small cheetah population patches across Africa which belong to four different subspecies of across Africa. Although there are indications of connectivity between different cheetah subspecies, this has not been officially documented, particularly between *A. j. raineyi* in Kenya and *A. j. soemmeringii* in Ethiopia/Somalia, which share genetic similarities.



The crucial question that needs to be addressed is

• Whether the eastern African cheetah (classified as *A. j. raineyi*, or *jubatus*) interbreeds with the north-eastern African cheetah (*A. j. soemmeringii*).

With financial support from The Rufford Foundation, me and my colleagues from the Cheetah Conservation Fund (CCF) Genetics Laboratory in Namibia are actively collecting genetic data to determine if hybridization occurs between the two subspecies. Over the past three months, we have received and analyzed samples of Kenyan origin using mitochondrial and microsatellite markers. The samples were collected by our Kenyan collaborator, Action for Cheetahs in Kenya (ACK) who are actively working on the ground in Kenya.



CCF also continues to work closely with ACK and the Kenya Wildlife Services (KWS) for the DNA extraction of additional samples collected. As part of the project, we are also making plans for me to go to Kenya to support cheetah specific capacity building to KWS and ACK.

Every piece of data collected is vital in our efforts to protect, conserve, and understand these magnificent and endangered creatures.