

Advanced genomic technology for the Caucasus region

Initiative: Zwischen Europa und Orient - Mittelasien/Kaukasus im Fokus der Wissenschaft

Bewilligung: 18.10.2020

Laufzeit: 2 Jahre

It is planned to undertake 1) a comprehensive upgrade of research infrastructure in the molecular ecology laboratory at ISU, and 2) a joint research investigation of biodiversity and refugial areas in the Caucasus region. Improvements to research infrastructure will provide modern biotechnology to researchers in the Caucasus region, including next generation sequencing (NGS) and real time PCR. Currently, these technologies are not available to scientists in the region working on biodiversity and species conservation. Because the laboratory also serves as a teaching facility providing training to students and researchers, this enhanced research capacity will also have a large impact on the technical training available to Georgian students and scientists. The research undertaken in this joint venture will foster ongoing collaboration between the partners, and provide opportunities for continuing exploration of biodiversity in the Caucasus, a recognized biodiversity hotspot. The targeted research contained within this proposal will explore cryptic refugial areas within the Caucasus, to test hypotheses about the historical provenance of the extraordinarily high levels of species endemism in the region.

Projektbeteiligte

Prof. Dr. Bernhard Misof

Zoologisches Forschungsinstitut und
Museum Alexander Koenig Leibniz-Institut
für Biodiversität der Tiere
Bonn

Dr. Cort Anderson

Ilia State University
Institute of Ecology
Tbilisi
Georgien

Prof. Dr. David Tarkhnishvili

Ilia State University
Institute of Ecology
Tbilisi
Georgien

Dr. Jonas Astrin

Zoologisches Forschungsinstitut und
Museum Alexander Koenig Leibniz-Institut
für Biodiversität der Tiere
Bonn