Institute for Bioinformatics and Evolutionary Studies (IBEST)

The Institute for Bioinformatics and Evolutionary Studies (IBEST) is an interdisciplinary research group at the University of Idaho that seeks to understand the patterns and processes of evolution that occur over comparatively short periods of time. Researchers investigate the relative importance and consequences of mutagenic processes, identify and understand patterns of evolutionary change that emerge during the course of evolution, develop and test models of evolutionary processes, and devise means to analyze large sets of genetic data. Many investigate the importance of extant genetic diversity within species, adaptive radiations, speciation, and the phylogeography of species. There is a high value placed on interdisciplinary collaborations that blend the expertise of biologists, biochemists, ecologists, evolutionary biologists, mathematicians, statisticians, and computer scientists to examine the underpinnings of evolutionary biology. This allows investigators to address research questions that are intractable to scientists from a single discipline in a collaborative environment that does not exist at most other institutions.

Three core facilities are within the institute and these provide investigators access to services and expert technical advice, as well as access to advanced instrumentation and computational facilities. The capabilities of the Genomics Resources Core, Computational Resources Core, Optical Imaging Core and IBEST teleconferencing infrastructure will be leveraged in the proposed research.