

## 2014 Clarksville Cave

### DNA Sequencing

Principal Investigator: Dr. Luis Espinasa

Proposal overview:

*Stygomobromus allegheniensis* is a small aquatic, troglobitic amphipod crustacean. The species has been reported in two of the most-visited, undeveloped caves in the Northeast. The Ice Caves at Sam's Point Preserve and Clarksville Cave. These two caves are 65 miles distant from each other and on different geological formations, so it is impossible that there is a cave connection between the two. Since in theory troglobites cannot survive on the surface, both populations could actually belong to different species. Students will sequence their 16S DNA in an effort to resolve if they belong to the same species or to different species, in which case one of the two cave populations could be a new, previously undescribed species.

Proposal approved March 9, 2014.

Published results from this project:

<http://subtbiol.pensoft.net/articles.php?id=10010>