

BAT 1K NEWSLETTER

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Dear Bat1K members,

We are happy to have you reading our 6th Bat1K Newsletter! We hope you have been keeping well, especially during these tough weeks. In this edition, we first provide a repository of articles relating to bats and COVID-19. Next, there is an update of our bat genome sequencing progress. Lastly, we feature our brand new newsletter column “Get to know Bat1K: Research Profiles”, presenting bat researchers from our diverse and international research consortium. We hope you will enjoy this edition of our quarterly Newsletter. Stay safe.

-Your Bat1K directors & steering committee

1. Bats and COVID-19

Although we all hoped the virus outbreak could be contained when the year started off, now we all find ourselves in the midst of a global pandemic. Meanwhile, we get to hear the news, densely packed with the coronavirus, the disease it causes, and also: bats. Researchers around the globe are doing their best to quickly understand the virus and its outbreak. Nevertheless, the rush to report and communicate complex scientific results has sometimes led to confusion, mistrust, and ultimately even fear and hatred towards bats. This misinformation about bats and the role they may play in the COVID-19 outbreak can only be countered with the best knowledge we can find.

To this end, we are compiling a list of articles and material that we will keep updated, please find our list [here](#) (click!). Please feel free to share this with others. We hope these readings help to put the facts in a broad, and scientifically sound perspective.

2. Genome sequencing progress

Now that our first six reference-quality bat genomes are complete (paper available [here](#)), Bat1K has officially moved into “Phase 1”, sequencing representatives from all 21 bat families.

Sequencing is complete for representatives from *Molossidae*, *Phyllostomidae*, *Pteropodidae*, *Rhinolophidae* and *Vespertilionidae*.

Sequencing is currently underway for *Emballonuridae*, *Natalidae* and *Thyropteridae*.

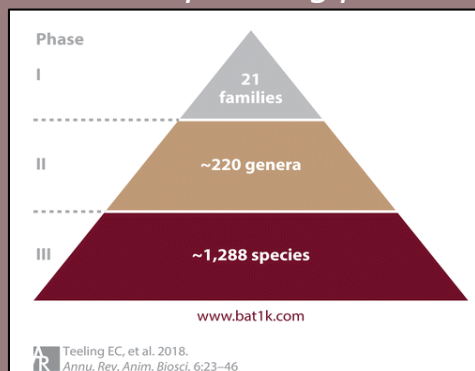
We are urgently searching for samples from *Cistugo seabrae*, *Furipterus horrens*, *Nycticeius humeralis* and *Mystacina tuberculata*.

If you have access to one or more of these samples and would like to collaborate with us, please contact us at bat1kconsortium@gmail.com. We are looking forward to new collaborations within the community!

Want to keep touch with bats from your home? The Lube Bat Conservancy has a live bat-cam. Check it out on their [website](#)!



Bat1K Sequencing plans





BAT 1K

3. Get to know Bat1K: Research Profiles

In each edition we will be presenting profiles of some of our Bat1K members through this new feature so you can get to know the members of Bat1K, what they are investigating and maybe even identify new potential collaborations!

Today we will be presenting two researchers who collaborate to identify genomic features associated with increased longevity in bats through US National Science Foundation funding. With their project they are both using and generating high-quality Bat1K genomes.

Prof. Liliana M. Dávalos

Prof. Liliana M. Dávalos is part of our Bat1K executive committee and professor in the Department of Ecology and Evolution at Stony Brook University, New York, USA. While, at first, she focused on bat historical biogeography for her PhD dissertation at Columbia University, her focus has since expanded to analyze the evolution of adaptations, molecular and otherwise, to extreme and unusual habits across vertebrates. Key discoveries made at the Dávalos lab include the single increase in speciation rates across all bats for fruit-eating stenodermatine bats, multiple adaptive peaks across Neotropical leaf-nosed bats, and parallel molecular adaptations in high-elevation hummingbirds. Next to her collaboration with David Ray (below), Dr. Dávalos works with Emma Teeling (Bat1K co-director, UCD Dublin, Ireland) and Angelique Corthals (John Jay College of Criminal Justice, New York, USA) in efforts to characterize the constraints and advantages emerging from the massive pleiotropy among metabolic, life history, and immune system adaptations in bats.



Liliana Dávalos

Prof. David Ray

Prof. David Ray is also part of Bat1K executive committee and is a professor in the Department of Biological Sciences at Texas Tech University (Texas, USA). Dr. Ray earned his BS and MAT (Master of Arts at Teaching) at the University of South Carolina. His PhD research focused on molecular evolution in crocodilians. During his postdoctoral studies at Louisiana State University and early professorships at West Virginia University and Mississippi State University, his focus changed to the study of transposable elements (TEs) in a variety of species, including primates and bats. The Ray laboratory were the first to identify the unique TE landscapes that are characteristic of vesper bats.



David Ray

..And lastly:

A survey to help preserve Chinese bats

A call to bat Researchers! There are 130 bat species in China and none of them are under Wildlife Protection. Please fill in this [questionnaire](#) (by Bo Luo, Key Laboratory of Southwest China Wildlife Resources Conservation) to help gather opinions on the conservation strategies of bats in China.