

BAT 1K NEWSLETTER



In this issue:

- Bat1K regional chairs 1.
- Bat1K steering 2. committee
- Bat1K research profile featuring Dr. Vazquez

Photo: Daniel Whitby



Welcome to our 9th Bat1K Newsletter!

In this newsletter we would like to announce our newly installed Bat1K regional chairs. We also present our newly organized steering committee and the different roles our steering committee members will cover. A research profile of one of our new regional chairs Dr. Juan Manuel Vazquez can also be found on the last page.

We would again like to thank you all for participating in our batellites and for working with us on installing the regional chairs. We are glad to work now closer than ever with our community and are excited for what the future holds.

Bat1K regional chairs



<u>Veronika Laine</u> Finland / Scandinavia

our next Batellite in June!



Manuel Ruedi Swiss / Europe







Juan Vazquez Western US& Canada

China

Come and meet the regional chairs during



Connecticut / Northern US





East Asia





Southeast Asia







3. Research Profile: Dr. Vazquez

We are happy to introduce one of our newly elected Bat1K regional chairs to you: Dr. Juan Manuel Vazquez, postdoc at the University California Berkeley. Vazquez, also known as "Manny", works in the **Sudmant lab** at UC Berkeley in the <u>department of integrative</u> biology.

Manny aims to shed light on the evolution of aging and understand aging associated traits. The topic of aging and health-span already sparked his interest when he was working with Andrei Seluanov and Vera Gorbunova as an undergraduate. It was only in grad school when Manny realized what a unique clade bats are. He says: "there are so many extant species, so closely related to one another, that if you want to study the evolution of any trait, bats would probably be the ideal system to study it". Specifically, a study from the lab of Vincent Lynch, which he joined as a graduate student, inspired him to investigate bats more. The study found duplications in the tumor suppressor gene TP53 in the Little Brown Bat (Myotis lucifugus).

In order to investigate this further, Manny began a mission to search for cell lines. While doing so and learning more about bats, he realized how many open questions there are for the bat species and how much inspiring research already exists. Surprising peoples when showing them how exceptional bats are, is one of his favourite aspects of his research. Manny also studies the evolution of aging and health-span in other fascinating animals like whales and elephants. In addition to generating reference genomes, his goal is to establish cell banks for at least 20-30 individuals of the species he studies, and to publish papers on the full power of functional genomics.

Why bats?

Manny says studying aging in bats is like the golden corner stone, "the promise that basic science can offer society", because it integrates science, nature, and society at every level: from our understanding of bat biology, to human health and therapeutics; and from the ecological impact of these cornerstone species, to humanity's relationship with the world and their environment. As Vazquez points out, "when we understand how bats and the environment interact with each other, bat research is not only about human health anymore, but about society and the world we live in as a whole".



Why Bat1K?

What Manny likes most about Bat1K is the collaborative spirit in the group, and the approach in making these genomes accessible but especially "the promise that it holds for setting standards for high quality genomics".

Also, beyond the genomes themselves, what he finds most promising is what we can do together once the genomes are made, like generating biobanks and iPSC libraries for different species to further unravel the mysteries of bats in a minimally-invasive manner.

Message to the Bat1K community

He urges the community to start looking for not only what is left to do, but also what we can do in the future. Reach out to your fellow researchers, maybe form working groups ("for instance, for population genetics, biobanking and iPSCs")... and use SLACK more often to connect!

Would you like to get in touch with Manny? Then do so via Slack or find further details on his page here.



Click the Slack box above to join us on Slack