

CCGP Newsletter

Issue #10 - February 14, 2023

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In Memoriam: Robert Wayne

Our colleague, collaborator, and friend, Professor Robert Wayne passed away on December 26th, 2022. Bob was a Distinguished Professor of Ecology and Evolutionary Biology (EEB) at UCLA, an internationally recognized scientist, and prominent member of our academic community. For those of us in the CCGP community, he was much more. Bob was an advocate for conservation genetics before most of us were comfortable putting those two words in the same sentence. He was an advocate, always, for applying the absolutely strictest standards of excellence to conservation research. And he influenced all of us, in how we approached our research, and how we prioritized out goals as conservationists. As a renowned evolutionary and conservation geneticist, some of Bob's most notable research delved into the evolutionary history of canids, including the sometimes-overlooked lessons we can learn from domestic dogs. Throughout his career, he pioneered the genetic research which aided in the conservation of a variety of canid species and other mammals.

Bob was the PI of four CCGP projects on Scrub-Jays, Townsend's big-eared bat, Yuma myotis, and Bobcat populations spanning California. He mentored several graduate students and postdocs, who will carry on these projects and his passion for conservation of threatened and endangered species.

Robert Wayne's legacy, in genetics, UCLA, and the CCGP will not be forgotten.

You can read more about Bob's contributions to science and his impact on students and colleagues <u>here</u>, and <u>here</u>. For those who wish to contribute, the American Genetics Association has established the <u>Robert K. Wayne</u> <u>Conservation Scholarship and Research Fund</u>, to support graduate students whose work directly benefits a threatened species.



California at COP15

California joined new alliances of states and provinces to accelerate environmental conservation at the <u>United Nations Biodiversity</u> <u>Conference (COP 15)</u> in Montreal. State leaders called for support of a <u>new global biodiversity framework</u> to take more ambitious action to safeguard the diversity of life on earth. California already made history as the first state in the nation to set a goal to conserve 30 percent of the state's

land and coastal waters by 2030 (<u>30x30</u>), continuing to serve as a model for global action to protect our planet. The CCGP is working closely with state leaders to provide a key landscape genomics component to the state's plans to implement the 30x30 initiative.



CCGP PI Spotlight: Hollis Woodard on LAist

CCGP PI <u>Hollis Woodard</u> (Associate Professor of entomology and wild bee

biologist at UC Riverside) was on radio station LAist's (formerly KPCC) AirTalk to discuss a new vaccine for bees to prevent American foulbrood disease. Woodard and collaborator <u>Margarita Lopez-Uribe</u> (Associate Professor of entomology at Penn State) explain the impact of the vaccine on honeybees and wild bee populations, interactions between honeybees and wild bees, as well as challenges, aside from bacterial disease, facing bee populations.

Click here to listen to the discussion

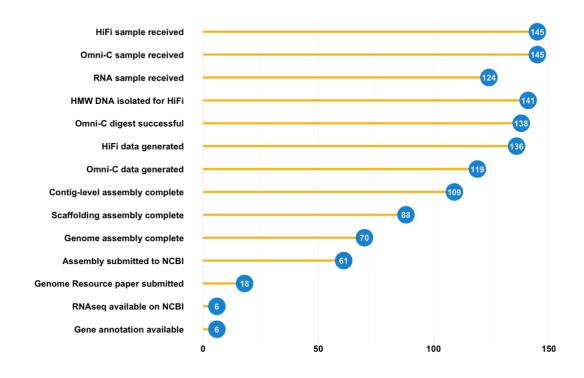
eDNA course with USFWS

The US Fish and Wildlife Service recently announced a training opportunity focusing on environmental DNA, and includes instruction on study design, implementation, and application. The course will take place at the Whitney Genetics Lab in Onalaska, WI and run from September 11 - 15, 2023.

Click here for the course flyer

On the topic of eDNA, the journal PeerJ recently published the article <u>"A</u> <u>manager's guide to using eDNA metabarcoding in marine ecosystems"</u> coauthored by CCGP PIs Paul Barber, Rachel Meyer, and Robert Wayne. The study discusses five steps to consider when developing an eDNA monitoring program and demonstrates the importance and success of each of these considerations using a case study of eDNA metabarcoding in the Ports of Los Angeles and Long Beach.

Reference genome sequencing progress



Number of Species Completed (as of February 14, 2023)

We're approaching the finish line for CCGP's reference genome data generation. The lab teams at UCD and UCSC have prepped about 95% of our species for sequencing. HiFi and Omni-C sequencing is complete for over 80% of all reference genome species. Finally, our genome assembler, Merly Escalona, has assembled 66 reference genomes with nearly all of these submitted to NCBI. Beyond the recent <u>JOH issue</u>, several Genome Resource articles describing completed assemblies are in the works!



Harris Lewin kicks off Distinguished Lecture Series

CCGP Technical Committee member and UC Davis distinguished professor emeritus, Harris Lewin, delivered the inaugural talk at the UC Davis New Emeriti Distinguished Lecture series. In this lecture he

chronicled the bovine leukemia research that led to his receiving the 2011 Wolf Prize in Agriculture. <u>Click here for more information and to find the link to the</u> <u>recorded lecture</u>.

The next lecture in the series, "The Evolution of Power", will be given by <u>Geerat</u> <u>Vermei</u>j and is at 5 p.m., Wednesday, Feb. 15. Registration can be found <u>here</u>.

CCGP IN THE NEWS

A new <u>feature article about the CCGP</u> was just published in the Los Angeles Times! This piece, written by Louis Sahagun, one of the Time's foremost staff writers, emphasizes the importance of landscape genomics in the context of conservation while showcasing the CCGP's anticipated contribution to California conservation. It's conversational, and is a great way to share the vision of the CCGP with science and non-science folks alike!

There is also <u>a great piece about the CCGP</u> in UCLA's Newspaper, the Daily Bruin.

Have anything to share?

As always, if your lab has any interesting information to share or you come across something that may be of interest to the CCGP community, please don't hesitate to let us know. <u>Click here to get in touch</u>!

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California Conservation Genomics Project

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