



CCGP Newsletter

Issue #07 - August 10, 2022

Contents

- 01:** All-Hands Meeting Reminder
- 02:** CCGP Year 3 Progress Report
- 03:** CCGP on GoaT
- 04:** CCGP Director elected to the American Academy of Arts and Sciences
- 05:** Reference genome assembly progress
- 06:** CCGP “Comings and Goings”

CCGP All-hands Meeting RSVP Reminder

If you are a PI or project team member, please remember to RSVP for the CCGP All-Hands meeting. The meeting will be held on **September 9th** at UCLA. At this meeting we will discuss project progress and plans, with an emphasis on WGS and landscape genomics. We also hope to hear from individual projects and hold in-person workshop discussions to solve any progress speed bumps that PIs and team members may have encountered.

[Please click here to RSVP](#)

We are looking forward to seeing everyone next month!

CCGP Year 3 Progress Report

Year 3 of the CCGP has been filled with exciting progress in data generation, pipeline development, new team members, and community engagement. In the Third Year Annual Progress Report we describe some of our key accomplishments and outcomes, many of which have already been shared with the CCGP community. We are particularly proud of the progress made in our whole genome resequencing (WGS), both in terms of sampling efforts of CCGP investigators, and the progress made by the Bioinformatics team in processing these data and developing the variant calling pipeline. We also discuss the final stretch of our team to finish up the reference genome component of the CCGP. The report highlights the meetings and webinars over the past year that involved both CCGP members and the broader scientific community. Finally, in addition to a long list of talks and presentations where the CCGP was featured, there is a growing number of CCGP publications. If you would like to peruse the progress narrative for this report, please click the button below.

[Click here to access the report](#)



CCGP page on Genomes on a Tree (GoaT) website

[Genomes on a Tree \(GoaT\)](#) is a platform that presents genome-relevant metadata for all Eukaryotic

taxa across the tree of life. Supported by [GenomeHubs](#), it uses multiple sources to organize genome assembly attributes, genome sizes, C values, chromosome numbers and other metadata. It also hosts project-dedicated pages to view and download sequencing status and reports for the [Earth BioGenome Project](#) and its affiliated projects. Our CCGP page can be found [here](#).

Special thanks to Dr. Cibele Sotero-Caio, the Genomic Data Curator with the Tree of Life Programme at the Wellcome Sanger Institute for translating our tracking information and constructing the CCGP page!

CCGP Director Brad Shaffer elected to the American Academy of Arts and Sciences

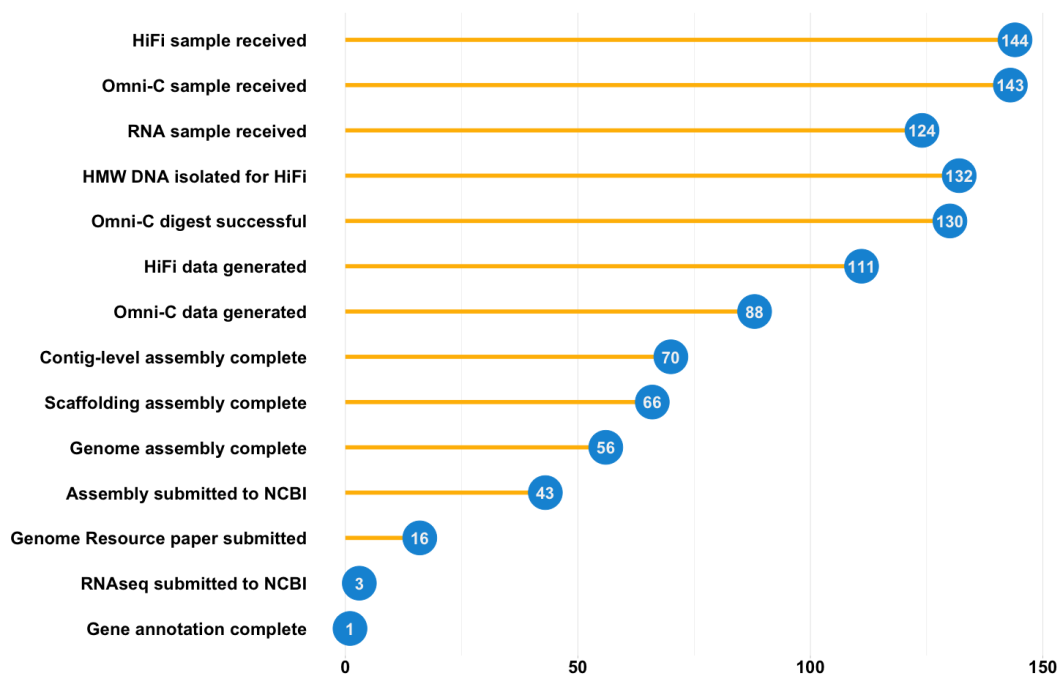
CCGP Director/PI Dr. Brad Shaffer, along with several UC faculty members, was elected to the American Academy of Arts and Sciences, one of the nation's most prestigious honorary societies. Dr.



AMERICAN ACADEMY
OF ARTS & SCIENCES

Shaffer is included in Section 4 – Evolution and Ecology in Class II – Biological Sciences. The complete list of 2022 Members can be found [here](#). CCGP Co-Director/PI and American Academy inductee (2021) Dr. Victoria Sork, was also recognized in the [Spring 2022 Bulletin](#) of the American Academy of Arts & Sciences for her involvement with the "A Night at the Museums" virtual event. Dr. Sork gave a tour of the Mildred E. Mathias Botanical Garden and shared how it serves as a resource for DNA research, a venue for public engagement, and a way to honor communities native to the Los Angeles Basin.

Reference genome sequencing progress: We're getting close!



Number of Species Completed (as of August 10, 2022)

The lab teams at UCD and UCSC have completed high molecular weight DNA extractions and Omni-C digests for about 90% of our species while HiFi and Omni-C data has been generated for approximately 75% and 60% of all reference genome species, respectively. Our genome assembler, Merly Escalona, has assembled nearly 60 reference genomes with the majority of these submitted to NCBI. The latest Genome Resource article to be published is for the [Black Surfperch \(*Embiotoca jacksoni*\)](#). A future 2022 issue of the JOH will be dedicated entirely to the CCGP! Please keep an eye out for Genome Resource papers for the following species:

- *Actinemys marmorata* - Northwestern Pond Turtle
- *Embiotoca jacksoni* - Black Surfperch
- *Haliotis cracherodii* - Black Abalone
- *Semicossyphus pulcher* - California Sheephead

- *Pisaster brevispinus* - Giant Spiny Sea Star
 - *Agelaius tricolor* - Tricolored Blackbird
 - *Haliotis rufescens* - Red Abalone
 - *Cebidichthys violaceus* - Monkeyface Prickleback
 - *Clinocottus analis* - Woolly Sculpin
 - *Anthopleura sola* - Sunburst Anemone
 - *Arizona elegans* - Glossy Snake
 - *Mytilus californianus* - Mytilus californianus
 - *Charina bottae* - Rubber Boa
 - *Linanthus parryae* - Sand Blossoms
 - *Lynx rufus* - Bobcat
-

CCGP “Comings and Goings”

The CCGP recently said farewell to our fantastic CCGP Mini-Core technician, Daniel Oliveira. During the last two years, Daniel spearheaded the development of our tissue-to-sequence pipeline and carried out DNA extractions and library preps for thousands of CCGP samples. We wish Daniel the best as he pursues a graduate program studying adaptation in salamanders (Brad is



very, very happy about this) at UC Berkeley with CCGP PI Dr. Ian Wang. While we are heartbroken to lose Dan, we are thrilled to welcome Andrew Tully to the team! Andrew will be picking up where Daniel left off as the new Mini-Core technician. As a Molecular and Cell Biology Technologist at the world-renowned Jackson Laboratory in Bar Harbor, Maine, Andrew spent the last several years developing and validating novel mouse models using CRISPR/Cas9 approaches. Andrew is getting familiar with the Mini-Core workflows and looking forward to supporting CCGP research efforts as he moves into the world of conservation genetics.

CCGP IN THE NEWS

UC Santa Cruz newsroom/University of California News just ran a great article: [Massive genomics study aims to protect California biodiversity](#). This piece features the CCGP research efforts and UC collaboration. It highlights UC Santa Cruz contributions, notably our genome assembler extraordinaire, Merly Escalona.

On a completely different front, Brad Shaffer recently gave a talk at the annual [Joint Meeting of Ichthyologist and Herpetologists](#) in Spokane, WA highlighting the role of the CCGP in reptile and amphibian conservation efforts. Several attendees, from Nevada and Texas, expressed an interest in trying to replicate our efforts in their states. Who knows—maybe a trend is developing?

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. [Click here to get in touch!](#)

CCGP Contacts:

Brad Shaffer (*Director*) brad.shaffer@ucla.edu

Erin Toffelmier (*Associate Director*) etoff@ucla.edu

Courtney Miller (*Fund/Project Manager*) courtneymiller@ucla.edu

Andrew Tully (*Lab Technician*) andrewtully@ucla.edu

Merly Escalona (*Reference genomes*) mmescal@ucsc.edu

Ryan Harrigan (*Landscape analysis & mapping*) iluvsa@ucla.edu

California Conservation Genomics Project

ccgproject.org

[Unsubscribe](#)

