

PANDEMIC DOESN'T STOP STUDENTS' ENVIRONMENTAL FIGHT

While COVID-19 has dominated public awareness over the past year and a half, climate change, pollution, invasive species, fire and more continue to threaten the world's future. Fortunately, a group of graduate students could carry out critical environmental investigations despite pandemic protocols limiting much scientific activity at UCI in 2020. This spring, they reported on their work and experiences in conducting research during the global outbreak.

Days after California Governor Gavin Newsom declared the March 2020 stay-at-home order, UCI leadership began releasing guidelines governing how scientists could perform critical research in the face of limited lab access. A variety of ecological and environmental studies were able to continue because they were taking place in various field locations rather than on campus.



RIDGE TO REEF

Prof. Steven Allison



Ariane Jong



Ashley Green



Phoebe Dawkins



David Banuelas

Twelve months later, Ecology and Evolutionary Biology Professor Steven Allison, director of the Ridge to Reef Graduate Training Program, moderated a panel by students conducting those research projects. Professor Allison lauded their determination, saying, “They know their work is so important that it has to go on despite the challenges from the pandemic.”

Participating were Ecology and Evolutionary Biology graduate students David Banuelas and Phoebe Dawkins, and Ashley Green and Ariane Jong from the Department of Civil and Environmental Engineering. They presented summaries of their investigations, including;

- **Examining how the increase in Southern California fires is affecting the region’s flood risk.**
- **Exploring whether restoring fungi to previously-logged forests can help redwoods there grow taller.**
- **Developing a new technique called “green gravel” to rebuild the California coast’s kelp forests, which have shrunk by 90 percent.**
- **Improving COVID-19 detection in the region’s wastewaters to track disease trends.**

There are many ways the public can help protect the natural world, the students said. They include cutting down on single-use plastics, properly disposing of waste, learning more about one’s own flood risk and supporting environmental non-profit organizations.

In conducting their research, the panel members partnered with various community agencies and groups, including the Riverside County Flood Control and Water Conservation District, Newport Bay Conservancy, Irvine Ranch Water District and Sanitation Districts of Los Angeles County.

Performing field research as the pandemic got underway did produce some hurdles, the presenters said. Maintaining social distancing was a challenge, and it was difficult to keep track of the many safety recommendations from local, state and federal agencies. However, with their talents, energy and dedication to the environment, the students discovered important insights while advancing their educations.

