Since she was an undergrad, Dr. Leah Thornton Hampton has been drawn to the tradeoffs associated with environmental toxicology work.

She loves the tension between the different possible toxicological approaches scientists can take to examining environmental challenges – and the inherent resource limitations that force them to make tough choices about which investigations to undertake.

“There are so many different directions and ways to approach problems in environmental toxicology,” said Thornton Hampton, a toxicologist. “Some people get really stressed with environmental risk assessment, but that’s what makes toxicology so fun to me – it’s a giant puzzle where you’re trying to meet everyone’s needs.”

Thornton Hampton, who just defended her doctoral dissertation via videoconferencing on March 20, 2020, started Wednesday as a Scientist in the Toxicology Department.

She will focus on studying the fate and effects of microplastic particles in drinking water and ambient ecosystems – a foundational element of SCCWRP’s rapidly expanding research program to understand how ubiquitous microplastics pollution may be impacting the health of aquatic animals and humans.

A zoology major in college, Thornton Hampton’s career trajectory was shaped when she took her first undergraduate environmental risk assessment course at Miami University in Ohio.

Soon after, she began working in a campus toxicology lab, where she met postdoctoral researcher Dr. Marlo Jeffries. After Jeffries took a faculty position at Texas Christian University in Fort Worth, Thornton Hampton followed, training as a toxicologist under Jeffries and earning her M.S. in biology. She went on to earn her Ph.D. in biology from the University of North Texas, about 45 minutes north of Fort Worth.

Thornton Hampton’s dissertation examined the effects of early-life-stage thyroid suppression on long-term immune function in fish.

About two years ago, Thornton Hampton began looking for jobs in the Los Angeles area, after her husband relocated to Hawthorne to work as a SpaceX engineer. Jeffries, who had collaborated in the past with SCCWRP’s Dr. Alvina Mehinto, introduced her to SCCWRP.

“SCCWRP is my dream job,” Thornton Hampton said. “We have such an incredibly unique opportunity here to influence environmental policy and real-world decisions.”

A native of Helena, Alabama outside Birmingham, Thornton Hampton started swimming competitively at age 10. At Miami University, she swam the 100- and 200-yard backstroke and 200-yard medley. The highlight of her swimming career was competing in the 2012 U.S. Olympic Trials.

Now retired from swimming, she has transitioned to scuba diving – just for fun. In Southern California, she’s most looking forward to exploring underwater kelp forests.