San Diego Student Among 2021 International Young Eco-Hero Award Winners

Local Student Receives Top Honor for Contributions to Solving Environmental Problems

San Francisco – Kyle Tianshi, a 14 year-old from San Diego, California is one of 25 young environmental activists from across the globe honored by Action For Nature (AFN) as a 2021 International Young Eco-Hero, an award that recognizes eco-conscious youth ages 8 to 16 who are taking crucial steps to solve tough environmental problems.

Winners of the International Young Eco-Hero Award are selected by a panel of independent judges, including experts in environmental science, biology, and education. Since 2003, Action For Nature has recognized more than 300 Eco-Heroes from over 30 countries and 25 U.S. states.

Kyle won the Innovator Award in the 8-14 year-old category for his project, NEREID and Clearwater Innovation.

Being immigrants from China, Kyle’s parents didn’t have clean, filtered drinking water when they grew up, so they never let him drink tap water. Curious about why they were so concerned, he started to research water pollution and learned that officials in his home state of California are in the process of adopting a standardized testing method for monitoring microplastics in drinking water. However, measuring microscopic particles in water is expensive, making it inaccessible for many families. Determined to find an affordable and scalable solution, Kyle invented NEREID, a patent pending, portable microscopic particle detector that can rapidly find microplastics in water using a laser. This solution offers a low-cost alternative for families that do not have access to water filtration systems.

In addition to inventing this water filtration system, Kyle and his sister founded a nonprofit, Clearwater Innovation, that encourages student environmental garage-lab research and generates awareness about the global water crisis. They have hosted 12 community outreach events in 2020, and have recruited 50 environmental advocates across 6 states to run beach clean-ups and raise their voices online to advocate for the environment.

“Kids like Kyle have shown that the next generation of leaders is here, and they are refusing to wait to solve the most pressing environmental challenges,” said Beryl Kay, president of Action For Nature, an international non-profit organization that encourages young people to nurture a love and respect for the Earth and to take personal action to improve the environment. “The projects that these young people created will not only have real, positive impacts on their communities, they will also help solve global climate challenges and inspire others – no matter what age – to consider what they can do to help.”

“There may be as high as 50 trillion microplastics in our seas and studies predict that 90 percent of our drinking water and tap water could contain microplastics. That’s why I was thrilled that my invention has the potential to create a real impact for families concerned about microplastics,” said Kyle Tianshi.

“Studies predict that 90% of our drinking water could contain microplastics. Plastics adhere to toxins such as lead extremely easily and act as a vehicle for pathogens to enter our bodies,” said Kyle Tianshi. “I was
thrilled that my invention, which was made in my garage mostly using supplies from around my house, could generate so much interest."

To read more about Kyle’s work, check out the project website at clearwaterinnovation.org.

To learn more about this year’s International Young Eco-Hero Award winners, visit actionfornature.org/eco-hero-awards/2021-awards.

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*Action For Nature (AFN) is an international non-profit organization based in San Francisco, California, that encourages young people to nurture a love and respect for Earth’s natural resources and to take personal action to better their environments.*