

Defining the Future of the  
Public Research University

# UC San Diego

# #1

UC San Diego's Scripps Institution of Oceanography is the best doctoral program of its kind, as ranked by the National Research Council

UC San Diego is ranked by *Surfline* as the best surfing school in the nation.

## Charging Ahead

From its inception, the University of California, San Diego has attracted leading scholars with an entrepreneurial spirit and a penchant for risk-taking. The freedom to cross boundaries and to create new disciplines fuels breakthrough research with global impact. Our visionaries are looking for the next discoveries that will benefit people around the world in all walks of life.

## LIVING THE *Life Aquatic*



Campus volunteers help clean up the beach.



Davey Kline, Ph.D.

## REINVENTING *Medicine*



Elizabeth Winzeler, Ph.D.



Alysson Muotri, Ph.D.

## Meeting the Beach

Each year, during UC San Diego's Welcome Week, students gather for beach games, surf and kayak lessons, and a massive beach cleanup. The event, called Meet the Beach, provides an opportunity for the campus to connect with its unique community and environment. The cleanup is a part of the Volunteer50 initiative, which encourages the campus community to perform 50 hours or more of community service during the academic year.

## Conserving Coral Reefs

In addition to their natural beauty, coral reefs are ecologically and economically important ecosystems. By using computers to control CO<sub>2</sub> and water temperature above complex reef systems, **Davey Kline** is simulating future ocean conditions to better understand what might happen as the oceans warm and acidify. His research will help guide future decisions to protect and conserve the valuable reefs.

## Fighting Malaria on Multiple Fronts

Malaria affects anywhere from 250 to 500 million people annually. Despite recent advances, the ailment persists as one of the world's deadliest infectious diseases. **Elizabeth Winzeler's** innovative research at the interface of chemistry and genetics employs advanced screening programs to create novel candidates for possible treatment. Her work investigates new classes of drugs that appear to target the disease parasite at all stages of its development and transition.

## Building a Model of Autism

Autism spectrum disorders are complex neurodevelopmental diseases characterized by deficits in verbal communication, impaired social interaction, and limited and repetitive interests and behavior. **Alysson Muotri** and colleagues have used stem cells from patients with Rett syndrome, one of the most aggressive forms of autism, to create the first human cellular model of the disorder that could be used for drug screening, diagnosis and personalized treatment.

Learn more at [ucsd.edu](http://ucsd.edu).

# UC San Diego