

That's SOCAL POLY



A Brief History

LYLE CENTER FOR REGENERATIVE STUDIES

The idea for the Center for Regenerative Studies grew out of an assignment that Professor John T. Lyle gave his landscape architecture graduate students in 1976. His students imagined a community based on the value of sustainability. Twenty-five years after opening its doors, the Lyle Center serves as a living laboratory dedicated to interdisciplinary teaching and research related to the development of sustainable systems.

1994

The 16-acre center opens and welcomes 20 resident-students

1999

The center is renamed the John T. Lyle Center for Regenerative Studies

1996

The center joins the College of Environmental Design

2004

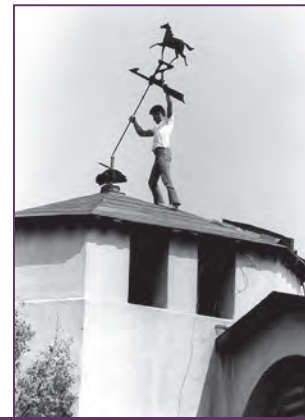
The first cohort of regenerative studies graduate students begins the program

1997

The facility is among the inaugural group of Top 10 winners of the American Institute of Architects Committee on the Environment, the nation's most important award in sustainable architecture

2010

The Lyle Center becomes the first carbon-neutral facility in the CSU after the installation of two solar panels supplied by Amonix



University Plaza

University Plaza started as a famous Southern California landmark that housed W.K. Kellogg's prized Arabian horses. Completed in 1926, they were described as "mansion stables" by a Pomona Bulletin writer because of the incorporation of every modern convenience known to keeping horses. While the building now houses the Office of Student Life, its arches, tower and weathervane continue to serve as campus landmarks associated with the Kellogg heritage.



\$80,198

Cost to build the stables in 1926

2

All-gender bathrooms

30

Box stalls

By the Numbers

60

Arabian horses purchased by Kellogg before the stables opened

15

Staff members who work in University Plaza

24

Arches

Zika, West Nile, Mosquitos, Oh My!

Over the last few years, there has been an increase in new mosquito-borne viruses. **Douglas Durrant**, professor of biological sciences, is working to understand how immune responses to those types of viruses are regulated within the central nervous system.

WHAT IS YOUR RESEARCH FOCUS?

Zika, West Nile and Eastern Equine viruses are all neurotropic, meaning that they preferentially infect neurons. My work is on the immunology side. We're trying to understand how the immune system responds to the viral infection and how the immune system is able to clear the virus with the least amount of damage.



WHAT ARE YOU DOING IN THE LAB?

The brain is fascinating. Its immune response to an invading pathogen is different than the immune response in the rest of the body. We're looking at infected brain tissue samples and comparing samples where we've eliminated a specific type of immune cell to normal samples. We want to know how much virus is there, what type of immune cells are involved, the number of immune cells, their activity level and whether they are providing protection or causing more damage. Our key question is what is causing the neurons to die. Is it the viral infection itself or is it the immune response to the viral infection, or is it a mixture of both? We are particularly interested in the role of dendritic cells in regulating this delicate balance between viral clearance and neuronal protection within the brain.

If we can figure out which cells are controlling the immune response so that it effectively kills the virus while simultaneously protects the neurons, then that information could lead to the development of treatments or therapeutics to harness that or to mimic that ability.

SHOULD WE WORRY ABOUT MOSQUITO-BORNE VIRUSES?

As we are moving more into the Amazon and as temperatures rise due to climate change, mosquito-borne viruses in humans will become more prevalent. There are many mosquito-borne viruses that humans haven't really come into contact with before.

However, our immune system is incredibly effective at keeping these emerging diseases under control. Even though a population might come into contact with a new viral infection, that population will eventually gain immunity.

