Student Research Project Symposium

for the

Pacific Center for Environmental Sciences (PaCES)
and
Hawai‘i Institute of Marine Biology (HIMB)

Summer Environmental Science Program for High School Students

Funded By
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Emmett R. Quady Foundation
Harold K.L. Castle Foundation
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Program Participants

High School Students Participants
Ashley Abraham, Le Jardin Academy
Greg Agcaoili, Castle High School
Vanston Ah Puck, Kahuku High School
Nicole Bell, Mid-Pacific Institute
Bryson Ching, Kailua High School
Lashelle Eguires, Waipahu High School
Daren Kuwaye, Kalani High School
Yvonne LaRouche, Le Jardin Academy
Kekainani Lucero, Moanalua High School
Calla McCarthy, Punahou School
Eric Pak, Castle High School
Chale Turner, Campbell High School
Ajah Valdez, Waianae High School
Natalia Villegas, Mid-Pacific Institute

Guest Speakers and Contributors
Greta Aeby, Hawai’i Institute of Marine Biology, University of Hawai’i
Arthur Aiu, Board of Water Supply, City & County of Honolulu
Chuck Burroughs, ‘Ahahui Mālama I Ka Lōkahi
Amy Eggers, Hawai’i Institute of Marine Biology, University of Hawai’i
Carl Evensen, College of Tropical Agriculture and Human Resources, University of Hawai’i
Bradley Kai Fox, Hawai’i Institute of Marine Biology, University of Hawai’i
Herb Lee, Pacific American Foundation
Jo-Ann Leong, Hawai’i Institute of Marine Biology, University of Hawai’i
Darin Hayakawa, Hawai’i Institute of Marine Biology, University of Hawai’i
Mark Heckman, Hawai’i Institute of Marine Biology, University of Hawai’i
Hawai’i Red Cross
Hui Kū Maoli Ola
Jen Kishimori, Hawai’i Institute of Marine Biology, University of Hawai’i
Lifeguards Hawai’i State
Ginny Lintecum, Hawai’i Institute of Marine Biology, University of Hawai’i
Willis Motooka, Waikalua loko Fishpond Preservation Society
Diane Moses, Board of Water Supply, City & County of Honolulu
Sarah Orput, Hawai’i Institute of Marine Biology, University of Hawai’i
Sal Pagliaro, Hawai’i Institute of Marine Biology, University of Hawai’i
Xavier Pochon, Hawai’i Institute of Marine Biology, University of Hawai’i
Kumu Keahi Renaud, Chaminade University
Jen Salerno, Hawai’i Institute of Marine Biology, University of Hawai’i
Kaimi Scudder, ‘Ahahui Mālama I Ka Lōkahi
Derrick Smith, Hawai’i Institute of Marine Biology, University of Hawai’i
Fred Takebayashi, Waikalua loko Fishpond Preservation Society
Clyde Tamaru, College of Tropical Agriculture and Human Resources & Hawai’i Institute of Marine Biology, University of Hawai’i

Student Mentors
Julia Gomes, Castle High School
Lauren, Grippo, Mililani High School
Ann Hashizume, Sacred Hearts Academy
Melody Kanda, Castle High School
Alexander Min, Iolani School

Student Teaching Assistants
Emily Gomes, University of Hawai’i at Mānoa
Jessica Leonard, Windward Community College
Celeste Yee, University of Hawai’i at Mānoa

Program Faculty and Coordinators
Robert Hutchison, Le Jardin Academy
David Krupp, Windward Community College & Hawai’i Institute of Marine Biology, University of Hawai’i
Mackenzie Manning, Kapiolani Community College & Hawai’i Institute of Marine Biology, University of Hawai’i
Malia Rivera, Hawai’i Institute of Marine Biology, University of Hawai’i

Special Thanks To
He’e Nalu Learning Center
Palikū Theatre
Symposium Schedule

8:30 A.M.  ‘Oli
Kumu Keahi Renaud, Professor, Chaminade University, and Understudy to Kahu John Keola Lake

8:40 A.M.  Welcome and Introductions
David Krupp, Professor, Windward Community College & Hawai‘i Institute of Marine Biology, University of Hawai‘i
Jo-Ann Leong, Director, Hawai‘i Institute of Marine Biology, University of Hawai‘i
Doug Dykstra, Chancellor, Windward Community College, University of Hawai‘i
Malia Rivera, Education Specialist, Hawai‘i Institute of Marine Biology, University of Hawai‘i

9:00 A.M.  Keynote Presentation:  *Science and the past, present, and future of coral reefs*
Dave Raney, Chair, Sierra Club Coral Reef Working Group, Sierra Club National Marine Wildlife and Habitat Action Team

9:30 A.M.  Break

9:45 A.M.  Student Presentations
Robert Hutchison, Moderator

  Investigating the correlation between water quality and the species found in the invasive algae, *Gracilaria salicornia* in Kāne‘ohe Bay
Lashelle Eguires, Daren Kuwaye, Calla McCarthy
Melody Kanda, Mentor

  Comparing mauka and makai water quality of the Kawai Nui Marsh levee
Vanston Ah Puck, Nicole Bell, Chale Turner
Alexander Min, Mentor

  The density and composition of zooplankton during incoming and outgoing tides in Waikalua loko fishpond
Greg Agcaoili, Eric Pak, Ajah Valdez
Ann Hashizume, Mentor

  Effects of ocean influence and algae photosynthesis on Hawai‘i intertidal zones
Bryson Ching, Yvonne LaRouche
Julia Gomes, Mentor

  Exploration of sewage-indicator bacteria at Maunawili, Kapena, and Jackass Ginger swimming sites
Ashley Abraham, Kekainani Lucero, Natalia Villegas
Lauren Gippo, Mentor

11:00 A.M.  Special Treat

11:15 A.M.  Closing Remarks and Refreshments
Mr. Dave Raney
Chair, Sierra Club Coral Reef Working Group, Sierra Club National Marine Wildlife and Habitat Action Team

Mr. Dave Raney received his Bachelor of Science in Mechanical and Electrical Engineering from the University of Florida in 1960. In 1965, he received a Master of Science in Management from M.I.T.

Since his retirement in 1993 from 21 years in management at Straub Clinic and Hospital in Honolulu, Dave Raney has been a volunteer and activist in various environmental endeavors, especially those dealing with the conservation and protection of coral reefs. Since 1998, he has represented the Sierra Club at United States Coral Reef Task Force meetings. He also sits on the Task Force’s Education and Outreach Working Group. He is the Chair of the Coral Reef Working Group of the Sierra Club National Marine Wildlife and Habitat Action Team.

In 2000, Dave Raney established Reef Check on O‘ahu. Reef Check is a volunteer coral reef monitoring and educational outreach program active in some 82 countries around the world. Dave currently acts as the Senior Advisor to Reef Check Hawai‘i.

In 2008, Dave received the Sierra Club, Hawai‘i Chapter, Mālama Honua Award for “protecting our special places.” He also received the Sierra Club national Special Service Award for work on coral reef protection in 2003 and the Sierra Club national Special Achievement Award for coastal zone management leadership in 1980.