CREST JANE GOODALL SCIENCE SYMPOSIUM

2017

ISEF Regional Special Awards

Outstanding Project in Atmospheric Science

Sponsored by the American Meteorological Society

Camryn Pettenger-Willey

The Effect of Varying pH and Temperature on the Growth Performance of Synechocystis

Alondra Sotelo Laureano

The Measurement of Lower Ozone Layer Thickness Through Live Data

Outstanding Research in Psychology

Sponsored by the American Psychological Association

Alex Armitage and Gregory Gandy

Examining the Diffusion of Internet Information

Outstanding Project in Materials Science

Sponsored by the ASM Materials Education Foundation

Kyla Wiegand and Sarah Frechette

An improved method for molecular sieve regeneration to be used in a cost effective and energy efficient manure lagoon cover

ASU Walton Sustainability Solutions Award

Sponsored by the Arizona State University Rob & Melani Walton Sustainability Solutions Initiative

Viv Kiss

Differentiating between the levels of electrical outputs between grass fed and grain fed cattle waste using Microbial Fuel Cells

Kristopher Wieland and Jared Wieland

Revolution of Self-Fertilizing Crops

Intel Excellence in Computer Science

Sponsored by Intel Corporation

Pooja Jain

Hacked! Unauthorized WiFi Access Through Weak Password Exploitation

NASA Earth System Science Award

Sponsored by National Aeronautics and Space Administration

Ally Finkbeiner, Sydney Byun

The Effect of Carbaryl on Bee Gut Microbiota

Taking the Pulse of the Planet Award

Sponsored by the National Oceanic Atmospheric Administration

Hannah Budroe and Michelle Stevens

The Effect of Changing Temperature and pH on the Early Embryonic Development of Purple Sea Urchins (Strongylocentrotus Purpuratus)

Naval Excellence in Science and Engineering Award

Sponsored by the Office of Naval Research, US Navy / Marine Corps

Andrea Russell

Quantifying Magnetite's Ability to Reduce Contaminants

Elijah Kilstrom

Vacuum Airship, continued study

Virginia Schweitzer

Effect of papain enzyme on biogas

Justin LeBlanc

A Concrete Solution - Examining A Potential Use For Recycled Expanded Polystyrene Dissolved With D-Limonene

Sustainable Development Award

Sponsored by the Ricoh Americas Corporation

Kyla Wiegand and Sarah Frechette

An improved method for molecular sieve regeneration to be used in a cost effective and energy efficient manure lagoon cover

Outstanding Achievement for Ability and Creativity in In Vitro Biology

Sponsored by Society for In Vitro Biology

Marlee Odell

Neonicotinoid Addiction in Honey Bees Using Fruit Flies

US Regional Stockholm Junior Water Prize

Sponsored by the Water Environment Foundation

Andrea Russell

Quantifying Magnetite's Ability to Reduce Contaminants

Weston Miller and Erin Groppe

The Effect of Pharmaceutical Contaminants on Daphnia magna

Kyla Wiegand and Sarah Frechette

An improved method for molecular sieve regeneration to be used in a cost effective and energy efficient manure lagoon cover

Outstanding Science or Engineering Fair Project

Sponsored by the US Air Force

Aileen Converse and Grace Converse

Engineering a Bacteriophage Dispersal System to Decontaminate Wastewater Treatment Ponds

Nikki Rudnick

GardenBot

Viv Kiss

Differentiating between the levels of electrical outputs between grass fed and grain fed cattle waste using Microbial Fuel Cells

Best Use of the SI:
The International System of Units

Sponsored by the US Metric Association

Mikayla Ellsworth and Arianna Chappell

The Effect of BPA on Planaria

Most Outstanding Eleventh Grade Exhibit

Sponsored by Yale Science and Engineering Association, Inc.

Raymond Berry

A Cheaper Approach to Grading Tests

The Biophysics Award

Sponsored by Biophysical Society

Mackenna Koppler

Utilizing Synechococcus elongatus to organically increase the amount of anthocyanin produced by Arabidopsis thaliana

Excellence in Scientific Research in Environmental Health

Sponsored by the Oregon Environmental Health Association

Nathan Tidball

Construction of novel single chamber MFC and effect of arsenic on biofilm development and efficiency

CREST Special Awards

Promising Young Scientist

Sponsored by CREST

Virginia Schweitzer

Elijah Cirioli

Grace Emhoff

Varsha Karthikeyan

Catherine Stamnes

Chloe Kuhlmann

Michael Talbert

Christopher Dunstan

Best Demonstration of Field Knowledge

Sponsored by CREST

June Hohl and Natalie Spencer

Schistocytes in Thrombotic Thrombocytopenic Purpura Treated with VonWillebrand Factor Antibodies

Best Experimental Design

Sponsored by CREST

Kyla Wiegand and Sarah Frechette

An improved method for molecular sieve regeneration to be used in a cost effective and energy efficient manure lagoon cover

Noteworthy Logbook

Sponsored by CREST

Makayla Bruce

Embracing Thoracic Scoliosis

Best "Digital" Project Board

Sponsored by CREST

Kristopher Wieland and Jared Wieland

Revolution of Self-Fertilizing Crops

Best "Analog" Project Board

Sponsored by CREST

Chloe Kuhlmann

Small but Mighty: The Effect of Size on Hummingbird Migration

Best Use of Statistical Analysis

Sponsored by CREST

Alex Armitage and Gregory Gandy

Examining the Diffusion of Internet Information

Most Creative Project Idea

Sponsored by CREST

Makayla Bruce

Embracing Thoracic Scoliosis

Paul Sherman Award

Sponsored by CREST

Chloe Kuhlmann

Small but Mighty: The Effect of Size on Hummingbird Migration

Nobuki Yaso

Pokemon Go and Physical Activity

Nalini Oliver and Faith Thompson

The Correlation between the Introduction of Hexokinase and Glucose 6-Phosphate Inhibitors on Colonization of Streptococcus lactis via Reducing ATP

Women In Engineering

Sponsored by CREST

Montana Walsh and Sydney Sovde

Continental Corrector

Best Multi-Disciplinary Research

Sponsored by CREST

Haidar Alzubaidi and Eli Osipov

Early detection of lung cancer using custom programmed Arduino gas sensors

Very Special Awards

Oregon State University
College of Engineering

Justin LeBlanc

A Concrete Solution - Examining A Potential Use For Recycled Expanded Polystyrene Dissolved With D-Limonene

Oregon State University

Jessica Yu

Safe with Me Now - A Novel System to Prevent Vehicular Hyperthermia in Children

Ji An

Heart Disease and Homeostasis in the Gut: How L.acidophilus and E.coli react with L-Carnitine

I-SWEEEP: International Sustainable World (Engineering, Energy, Environment) Project

Houston, Texas, May 3th to May 8th
Sponsored by I-SWEEEP,

Nathan Tidball

Construction of novel single chamber MFC and effect of arsenic on biofilm development and efficiency

Category Awards

Behavioral Sciences

Participants

Alex Armitage
Amanda McDougal
Audrey Cota-Davis
Brynn Cunningham
Emily McCarthy
Grace Emhoff
Grace McGovern
Gregory Gandy
Isabella Cannelos
Jake Heinonen
Jareth Anderson
Laura Bishop
Madison Piper
Madison Summers
Nathan Artman
Nobuki Yaso
Olivia Bean
Olivia George
Rory Cheevers
Shelby True
Summer Wille

Behavioral Sciences

Honorable Mention

Laura Bishop

Following Distances

Madison Piper and Olivia George

Do Phones Distract Our Abilities to Perform and Think Critically?

Behavioral Sciences

Third Place

Olivia Bean and Brynn Cunningham

The Correlation Between Smell, Taste, and Sight in Choice Blindness Among Males and Females

Behavioral Sciences

Second Place

Grace McGovern

Test of Video Game Addiction

Behavioral Sciences

First Place

Jareth Anderson

The Moral Sentence; Is It Right to Penalize People of Generalized Social Classes By a Crowd-sourced Judging of Peers?

Earth and Environmental Science

Participants

Allison Ingle
Alondra Sotelo-Laureano
Andie Jamison
Arianna Chappell
Beth Hoots
Blake Crane
Caitlin McCabe
Erin Groppe
Evan McKinley
Itzel Quiroz
Joe White
Justin Quan
Kaylee Inloes
Kristen Burke
Mikayla Ellsworth
Nila Komp-Mulkey
Samantha Edwards
Shelby Ricketts
Sophie Gossack
Varsha Karthikeyan
Weston Miller

Earth and Environmental Science

Honorable Mention

Mikayla Ellsworth and Arianna Chappell

The Effect of BPA on Planaria

Earth and Environmental Sciences

Third Place

Elizabeth Hoots

Will Warming Seas Leave Sea Urchins Belly-Up? The Effects of Increasing Temperature on S. purpuratus Motor Functions

Earth and Environmental Sciences

Second Place

Samantha Edwards and Itzel Quiroz

Phytoextraction: A Phytoremediation Technology

Earth and Environmental Sciences

First Place

Varsha Karthikeyan

The effect of detergent phosphorus and light levels on the health of Daphnia

Engineering: Electrical, Mechanical, and Computer Science

Participants

Aileen Converse
Chris Dunstan
Conor Smith
Ethan Sovde
Grace Converse
Jessica Yu
Jiahao Qui
Kristina Mason
Michael Talbert
Montana Walsh
Nathan Tidball
Nikki Rudnick
Pooja Jain
Raymond Berry
Sydney Sovde

Engineering: Electrical, Mechanical, and Computer Science

Honorable Mention

Nikki Rudnick

GardenBot

Engineering: Electrical, Mechanical, and Computer Science

Third Place

Montana Walsh and Sydney Sovde

Continental Corrector

Engineering: Electrical, Mechanical, and Computer Science

Second Place

Jessica Yu

Safe with Me Now - A Novel System to Prevent Vehicular Hyperthermia in Children

Engineering: Electrical, Mechanical, and Computer Science

First Place

Raymond Berry

A Cheaper Approach to Grading Tests

Environmental and Energy Engineering

Participants

Adam Steinhilber

Alexandra Saccente

Ashyan Rahavi

Dylan Burch

Gigi Schweitzer

Grace Jackson

Isabella Rovani

Jack Willard

Josie Reho

Justin LeBlanc

Logan Forsberg

Mallory Nelson

Morgan Wiedensmith

Nathan Tiddball

Sam Montagut

Tyler Frym

Viv Kiss

Wally Milner

Zachary Vertrees

Environmental and Energy Engineering

Third Place

Viv Kiss

Differentiating between the levels of electrical outputs between grass fed and grain fed cattle waste using Microbial Fuel Cells

Environmental and Energy Engineering

Second Place

Justin LeBlanc

A Concrete Solution - Examining A Potential Use For Recycled Expanded Polystyrene Dissolved With D-Limonene

Environmental and Energy Engineering

First Place

Nathan Tidball

Construction of novel single chamber MFC and effect of arsenic on biofilm development and efficiency

Life Sciences

Participants

Alyssa Rowe

Ashley Alexander

Averi Reed

Briana Alexander

Chloe Kuhlmann

Hannah Budroe

Jared Wieland

Katie Vedder

Kristopher Wieland

Mackenna Koppler

Marlee Odell

Michelle Stevens

Nicole Lang

Life Sciences

Honorable mention

Katie Vedder and Nicole Lang

Ex Situ Conservation: Cryopreservation of the common wheat seed, Triticum Aestivum

Life Sciences

Third Place

Hannah Budroe and Michelle Stevens

The Effect of Changing Temperature and pH on the Early Embryonic Development of Purple Sea Urchins (Strongylocentrotus Purpuratus)

Life Sciences

Second Place

Mackenna Koppler

Utilizing Synechococcus elongatus to organically increase the amount of anthocyanin produced by Arabidopsis thaliana

Life Sciences

First Place

Kristopher Wieland and Jared Wieland

Revolution of Self-Fertilizing Crops

Medicine and Health Sciences

Participants

Abby Holland
Acacia Like
Alex Gowen
Casey Roberts
Courtney Carter
Daniel Tang
Darian Breshears
Eleanor Johnson
Elijah Cirioli
Gabriella Juhala
Hannah Lester
Ian Tupper
Isabella Fenner
Josh Jones
June Hohl
Keith Tyler Revilla
Lauren Sandberg
Lexi Huebert
Lily Burhop
Mackenzie Clancy
Makayla Bruce
Natalie Spencer
Nathan Rice
Rebecca Hartner
Sabrina Smith

Medicine and Health Science

Honorable mention

June Hohl and Natalie Spencer

Schistocytes in Thrombotic Thrombocytopenic Purpura Treated with VonWillebrand Factor Antibodies

Medicine and Health Science

Third Place

Casey Roberts and Courtney Carter

Can untrained adolescents use a commercial allergen test designed by scientists and correctly interpret the result?

Medicine and Health Science

Second Place

Isabella Fenner and Eleanor Johnson

Sleep Deprivation and the Aggregation of Protein Modeled in Drosophila Melanogaster

Medicine and Health Science

First Place

Daniel Tang

A Path to Improving Gene Therapies for Liver-Related Diseases and Cancers through Selectable CRISPR-Cas9 Vectors

Microbiology

Participants

Ally Finkbeiner

Athena Lackides

Camryn Pettenger-Willey

Cate Stamnes

Dana Zaidan

Faith Thompson

Hannah Vedder

Ji An

Kiger Rhoades

Lauren Isaak

Marlee Feltham

McKenzie Meyer

Morgan Mankin

Nalini Oliver

Rachel Vedder

Rishima Mukerjee

Sophie Shelbourne

Sydney Byun

Teresa Valdez

Microbiology

Honorable mention

McKenzie Meyer

Prevention treatments for acne

Microbiology

Third Place

Dana Zaidan and Athena Lackides

Advancing the science of the treatment and pathogenesis of Alzheimer's disease; the effects of antibiotics in conjunction with a biofilm disruptor

Microbiology

Second Place

Camryn Pettenger-Willey

The Effect of Varying pH and Temperature on the Growth Performance of Synechocystis

Microbiology

First Place

Ji An

Heart Disease and Homeostasis in the Gut: How L.acidophilus and E.coli react with L-Carnitine

Physics, Chemistry, and Mathematics

Participants

Andrea Russell
Audrey Lipsey
Ben Ankeny
Camden Crystal
Christian Torralba
Dominic Enbody
Eli Osipov
Elijah Kilstrom
Haidar Alzubaidi
Jack Burns
Jacob Groh
Kyla Wiegand
Mary Kimball
Nina Pejcinovic
Quinn Willett
Sanjana Basak
Sarah Frechette

Physics, Chemistry, and Mathematics

Honorable mention

Kyle Wiegand and Sarah Frechette

An improved method for molecular sieve regeneration to be used in a cost effective and energy efficient manure lagoon cover

Jack Burns

Testing Cystic Fibrosis Lung Disease Severity

Physics, Chemistry, and Mathematics

Third Place

Audrey Lipsey and Katarina Pejcinovic

Bioprospecting: The Fuel of the Future

Physics, Chemistry, and Mathematics

Second Place

Andrea Rusell

Quantifying Magnetite's Ability to Reduce Contaminants

Physics, Chemistry, and Mathematics

First Place

Sanjana Basak

Presence of Evernic Acid in Evernia prunastri Lichen in Relation to Proximity to Major Roadways

CREST- Jane Goodall Science Symposium

Advancing to the Intel Northwest Science Expo

Northwest Science Expo, Portland Oregon

April 8th, 2017

Jareth Anderson
Grace McGovern
Olivia Bean
Brynn Cunningham
Laura Bishop
Madison Piper
Olivia George
Raymond Berry
Jessica Yu
Montana Walsh
Sydney Sovde
Nikki Rudnick
Nathan Tidball
Justin LeBlanc
Viv Kiss

Kristopher Wieland
Jared Wieland
Mackenna Koppler
Hannah Budroe
Michelle Stevens
Katie Vedder
Nicole Lang
Daniel Tang
Isabella Fenner
Eleanor Johnson
Casey Roberts
Courtney Carter
June Hohl
Natalie Spencer
Ji An

Camryn Pettenger-Willey
Dana Zaidan
Athena Lackides
McKenzie Meyer
Sanjana Basak
Andrea Russell
Audrey Lipsey
Katarina Pejcinovic
Kyla Wiegand
Sarah Frechette
Jack Burns
Varsha Karthikeyan
Samantha Edwards
Itzel Quiroz
Beth Hoots

Mikayla Ellsworth
Arianna Chappell
Nobuki Yaso
Chloe Kuhlmann
Gregory Gandy
Alex Armitage
Nalini Oliver
Faith Thompson
Pooja Jain
Marlee Odell

CREST- Jane Goodall Science Symposium

Intel ISEF Observers

Observers: Intel ISEF in Los Angeles, California

Hannah Budroe and
Michelle Stevens

The Effect of Changing Temperature and pH on the Early Embryonic Development of Purple Sea Urchins (Strongylocentrotus Purpuratus)

CREST- Jane Goodall Science Symposium

Best Of Fair

Advancing to Intel ISEF in Los Angeles, California on May 14th-May 18th, 2017

Kristopher Wieland and Jared Wieland

Revolution of Self-Fertilizing Crops

Jessica Yu

Safe with Me Now - A Novel System to Prevent Vehicular Hyperthermia in Children

Daniel Tang

A Path to Improving Gene Therapies for Liver-Related Diseases and Cancers through Selectable CRISPR-Cas9 Vectors

Jareth Anderson

The Moral Sentence; Is It Right to Penalize People of Generalized Social Classes By a Crowd-sourced Judging of Peers?

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2017