



# **WELCOME TO THE 30th ANNUAL AWARDS CEREMONY**

**April 28, 2020  
Via Zoom Webinar**



# You Took the Challenge!

# You Finished the Marathon!



# Master of Ceremonies

**Shaun Cooper**

**Past Member, Supercomputing  
Challenge Board of Directors**

**Retired NMSU CIO**

**College Professor, CS, NMSU**



# David Kratzer Introduces New Executive Director: Paige Prescott!

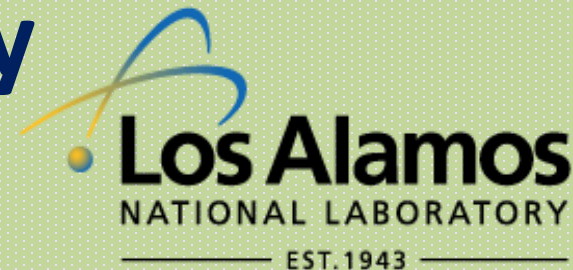




# LANL/Triad Welcomes You!

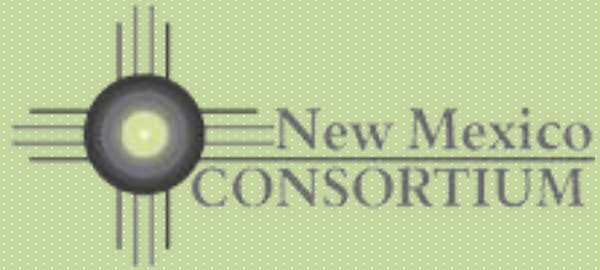
**Thom Mason**

**President and CEO of Triad National Security  
and Director of Los Alamos National  
Laboratory**





# New Mexico Consortium



**Thanks to Steve Buelow,  
CEO, NM Consortium,  
for all his assistance and  
support this year!**



# Consult Welcomes You

Through Patty, the Dinosaur!  
David and Paige!

Celia,  
Teri  
and  
Karen!



# Happy Birthday, dear Patty!





# Presentation 2020 Finalists



**Drum Roll, please!**



# The Finalists

## Team 13, Capital High

***Project Title: Gun Block: Detecting Guns in a Video Stream Using Learning***



***Team Members: Eduardo Pena, German Rojo, Oscar Sandoval Torres***

## Team 16, Eldorado High

***Project Title: It's Raining Seeds! Hallelujah!***



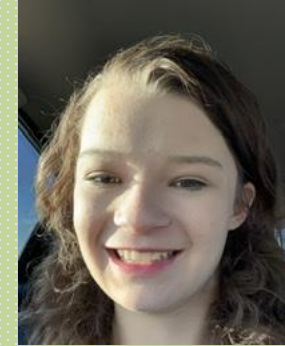
***Team Members: Brendan Kuncel, Savannah Phelps***



# The Finalists

## Team 17, Grady High

***Project Title:*** Encouraging Anti-Diabetic Lifestyles in NM Communities



***Team Members:*** Alexis Brandsma, Erynn Vetterly, Tristen Pool

## Team 20, Los Alamos High

***Project Title:*** Activity-by-Contact Model to Predict Enhancer-Gene Connections



***Team Member:*** Lillian Petersen



# The Finalists

**Team 56, Cottonwood Classical/Del Norte**  
**Project Title: Albuquerque Fire Department**  
**Wait Times**

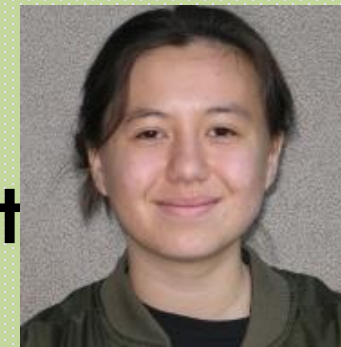


**Team Members: Kiara Onomoto, Ayvree Urrea**

**Team 59, NM School of the Arts**  
**Project Title: It's 'Bout to Get Lit Up in Here:**  
**Modeling Forest Fire Risks in Northern NM**



**Team Members: Rowen Jansens, Madelyn Kingst**  
**Maya Landess, Brandon Morrison**





# The Finalists

**Team 66, Socorro High**

**Project Title: Project Co-Op**

**Team Members: Cody Johnston, Elias Zheng, Lucas Ward, Rio Sessions**



**Team 1003, Los Alamos High**

**Project Title: Modeling Unknown Dynamical Systems with Neural Differential Equations -**

**Team Member: Robert Strauss**



# The Finalists

**Team 1005, Los Alamos High**

***Project Title:* Comparing Sparse and Dense Neural Networks: Using AI to Detect Cancer**



***Team Member:* Charles Strauss**



# I Took the Challenge! Returning School

## New Mexico Military Institute



Yoo Younggun



Ryan Lee



Nguyen Long



Khoa Do

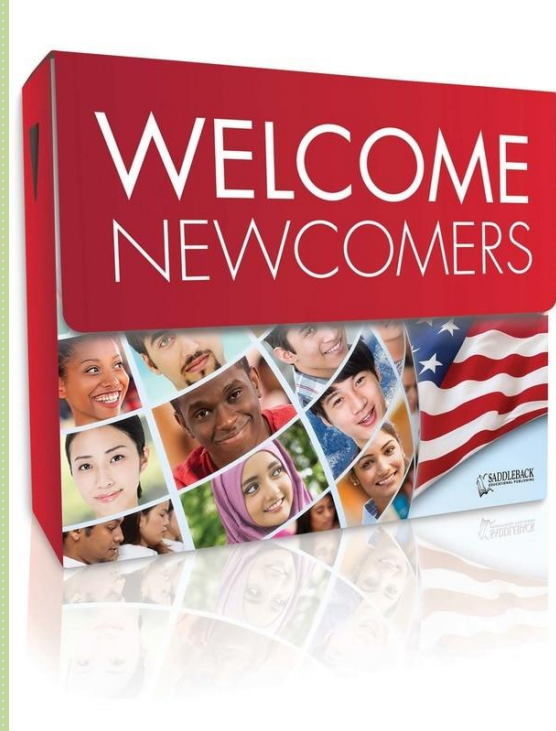


Jaejoon Lee

Team 58



# Newcomer Award



Sponsored by Bob and Peggy Robey





# Newcomer Award

**Team**

**17, Encouraging Anti-Diabetic  
Lifestyles in NM Communities**

**School**

**Grady High**

**Team Members**

**Alexis Brandsma, Erynn Vetterly,  
Tristen Pool**



**Teacher Sponsor**

**Leah Lee**

**Mentor**

**Alan Daugherty**



# Magellan Award



Sponsored by  
**Bob and Peggy Robey**

# Magellan Award



**Teams**

**1008, 1010, 1020**

**School**

**Gadsden Mid School**

**Members**

**Melody Pantoja, Yakov Esparza**

**Manuel Lopez, Carlos Villegas**

**Jesus Baca, Haleigh Garcia**

**Teacher Sponsor Danielle McFarland**



# Professional Presentation







# Professional Presentation

**Team  
School**

**59, Modeling Forest Fire Risks In NM  
NM School for the Arts**

**Team Members**

**Rowan Jansens, Madelyn Kingston,  
Maya Landess, Brandon Morrison**

**Teacher Sponsor**

**Mohit Dubey**

**Mentor**

**Stephen Guerin**



# Award for Agent-based Modeling using



Sponsored by  
Uri Wilensky  
Inventor of NetLogo

Chosen by  
Nick Bennett and Stephen Guerin



# Agent-based Model using NetLogo Award

Team	17, Encouraging Anti Diabetic Lifestyles in NM Communities
School	Grady High
Team Members	Alexis Brandsma, Erynn Vetterly, Tristen Pool
Teacher Sponsor	Leah Lee



# LANL Environmental Modeling Award





# LANL

## Environmental Modeling Award



**Team**

**1016, Wildfire Spread**

**School**

**Monte Del Sol**

**Team Members**

**Nefi Guevara, Hebert Soto,  
Maximillian Montoya, Shayla Anthony**

**Teacher Sponsor**

**Rhonda Crespo**



# Get out your badge number for a random prize for finishing your marathon!



And the winner is .....  
and the prize will be mailed  
to them shortly!

# Senator Udall's Climate Change Challenge Award



# Senator Udall's Climate Change Challenge Award

**Team**

**58, Deforestation Simulation Project**

**School**

**NM Military Institute**

**Team Members**

**Yoo Younggun, Jaejoon Lee, Nguyen Long, Ryan Lee, Khoa Do**

**Teacher Sponsor**

**Mark Stone**

**Mentor**

**Elizabeth Kallman, Chris Brown**



# Technical Writing Award





# Technical Writing Award

**Team**

**20, Activity-by-Contact Model to  
Predict Enhancer-Gene Connections:  
A Tool to Increase our Understanding  
of Cancer**

**School  
Team Member**

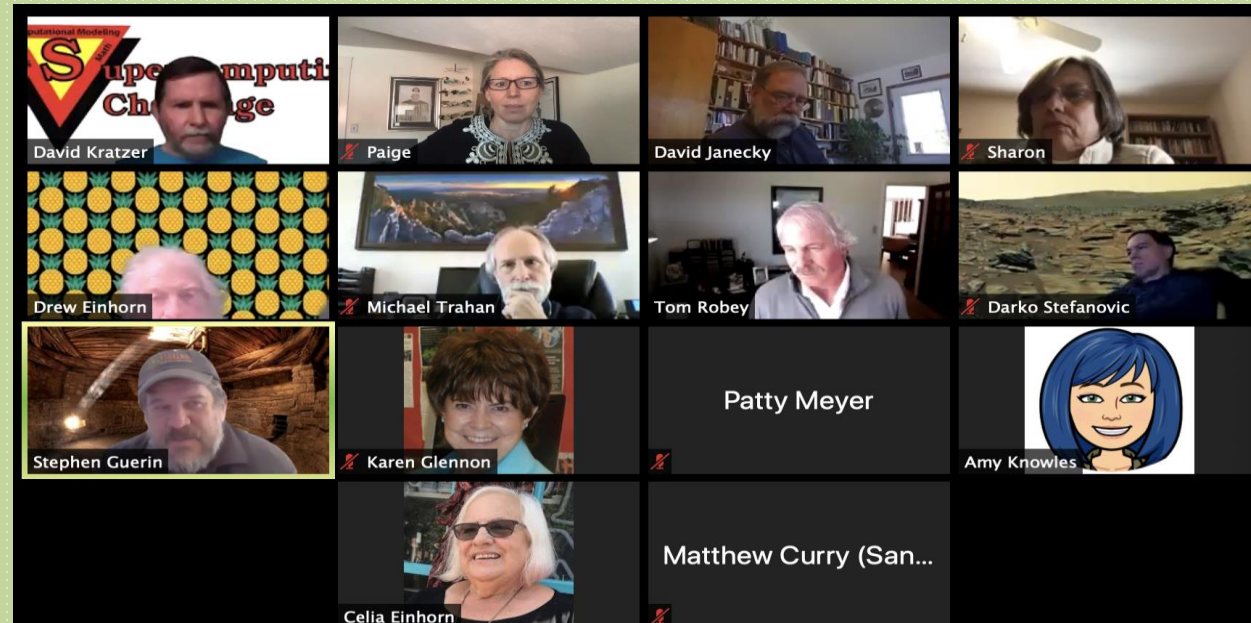
**Los Alamos High  
Lillian Petersen**

**Mentor**

**Graham McVicker**



# Recognition of Judges



# Community Impact Award



Sponsored by

Mark Fidel



# Community Impact Award



<b>Team</b>	<b>56, Albuquerque Fire Department Wait Times</b>
<b>School</b>	<b>Cottonwood Classical/Del Norte</b>
<b>Team Members</b>	<b>Ayvree Urrea, Kiara Onomoto</b>
<b>Teacher Sponsor</b>	<b>Karen Glennon</b>



# Innovation in Programming Award





# Innovation in Programming Award

**Team**

**1003, Automatic Differentiation  
and AI Applied to  
Computational Physics**

**School**

**Los Alamos High**

**Team Member**

**Robert Strauss**



# **Web Presentation of Final Report Award**

# Web Presentation of Final Report Award

**Team  
School**

**66, Project CO-OP  
Socorro High**



**Team Members**

**Cody Johnston, Elias Zheng,  
Lucas Ward, Rio Sessions**

**Teacher Sponsor**

**Jay Garcia**



# Middle School Award



# Middle School Award

**Team  
School**

**21, How to Win Monopoly  
Los Alamos Middle**

**Team Members**

**Asher Koh, Hyunoo Kim**

**Mentors**

**Aik-Siong Koh & S. Jun Kim**





# Teacher Appreciation Award

Thanks!



# Teacher Appreciation Award



**Recipient**

**Tracie Mikesell**

**Mesilla Valley Leadership  
Academy**



# NMTIE Research Award

NMTIE

Furthering Education through Technology



# NMTIE Research Award

NMTIE

Furthering Education through Technology

<b>Team</b>	<b>13, Gun Block: Detecting Guns in Video Stream Using Machine Learning</b>
<b>School</b>	<b>Capital High</b>
<b>Team Members</b>	<b>Edwardo Pena, German Rojo, Oscar Sandoval Torres</b>
<b>Teacher Sponsor</b>	<b>Barbara Teterycz, Irina Cislaru</b>
<b>Mentor</b>	<b>David Gunter</b>



# NMTIE Teamwork Award

NMTIE

Furthering Education through Technology





# NMTIE Teamwork Award

NMTIE

Furthering Education through Technology

**Team  
School**

**16, It's Raining Seeds. Hallelujah!  
Eldorado High**

**Team Members**

**Brendan Kuncel, Savannah Phelps**

**Teacher Sponsor**

**Karen Glennon**

**Mentor**

**Patty Meyer**



# Science Rocks Award



# Science Rocks

**Team**

**22, Fuel for Our Future**

**School**

**Los Lunas High**

**Team Members**

**Delsin Jaramillo,  
Edwin Fernandez** (not pictured)

**Teacher Sponsor**

**Anne Loveless**



# **Creativity and Innovation Award**



# Creativity and Innovation Award

**Team  
School**

**51, Deep Space Travel  
Melrose Middle**

**Team Members**

**Heidi Macfarlane,  
Levi Garrett** (not pictured)

**Teacher Sponsor**

**Alan Daugherty**





# Numbers Please!



# Logo for Next Year!

## Supercomputing Challenge

### Logo for 2020-21

Will be decided next year & teams will be  
mentored by professional graphic artists

**Sponsored by Dr. Shaun Cooper,**  
**NMSU**



# New Mexico Network for Women in Science and Engineering



# New Mexico Network for Women in Science and Engineering



**Team**

**25, Internet of Things Security: How  
to Keep IoT Devices Secure at Home  
Eldorado/Manzano High**

**School**

**Team Members**

**Nancy Avila, Gwenevere Caouette,  
Priscila Flores, Kyreen White**

**Teacher Sponsors**

**Sharee Lunsford, Karen Glennon**

**Mentor**

**Patty Meyer**



# Judges' Special Awards

Artificial Intelligence in Medicine  
Ecological Engineers  
Pioneering in Neural Networks  
Medical Imaging for Research





# Judges' Special Award

## Artificial Intelligence in Medicine

Team	1017, Visual Detection of Melanoma with A.I.
School	Los Alamos Middle
Team Members	Andrew Morgan, Harry McKigney (Not Pictured)
Mentors	Ed McKigney, Nathaniel Morgan



# Judges' Special Award

## Ecological Engineers

<b>Team</b>	<b>28, Avian Oasis Creating Water for Endangered Birds</b>
<b>School</b>	<b>Media Arts Charter School</b>
<b>Team Member</b>	<b>Colbie Boyd</b>
<b>Teacher Sponsor</b>	<b>Creighton Edington</b>



# Judges' Special Award

## Pioneering in Neural Networks

**Team**  
**School**

**15, Giving Signatures a Purpose**  
**Desert Academy**

**Team Members**

**Jonatan Kaare-Rasmussen,**  
**Ethan Garcia**



**Teacher Sponsor**  
**Mentor**

**Steff Eiter**  
**Chris Zappe**



# Judges' Special Award

## Medical Imaging for Research

**Team**

**1005, Comparing Sparse and Dense  
Neural Network Using A.I. to  
Detect Cancer**

**School**

**Los Alamos High**

**Team Member**

**Charles Strauss**

**Mentor**

**Garrett T. Kenyon**



# Human Computer Interaction

Sponsored by  
Stephen Guerin, SimTable



# Human Computer Interaction

Sponsored by  
Stephen Guerin, SimTable



**Team  
School**

**16, It's Raining Seeds! Hallelujah!  
Eldorado High**

**Team Members**

**Brendan Kuncel, Savannah Phelps**

**Teacher Sponsor**

**Karen Glennon**

**Mentor**

**Patty Meyer**





# Hewlett Packard/Cray High Performance Computing Award



# **Sponsor Recognition**

**Kudos for our sponsors!!**

**The people in these businesses and companies  
helped us  
reach the Finish Line!!**



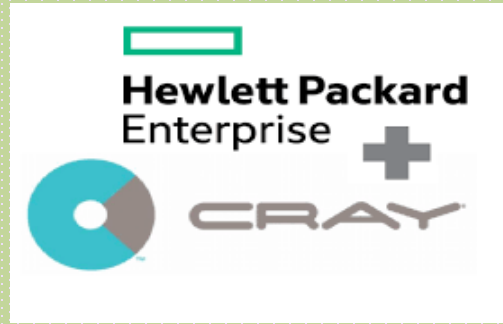
# Primary Sponsors



# Platinum Sponsors



# Gold Partners



# Silver Partners



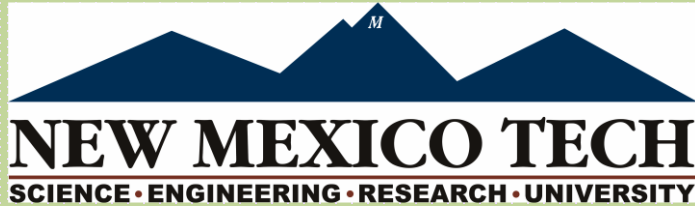
# Bronze Partners



Descartes  
Labs



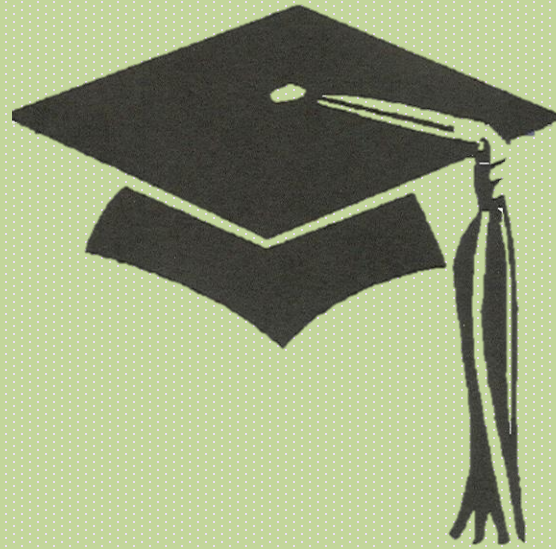
# Educational Partners



CNM In<sup>?</sup>enuity, Inc.



# Scholarship Recipients



Hope Cahill, Creighton Edington,  
and Dana Roberson

Scholarship Committee



# Scholarship Recipients

	<u>University</u>	<u>High School</u>
Brendan Kuncel	New Mexico Tech	Eldorado HS
Maximillian Montoya	New Mexico Tech	Monte Del Sol
Nefi Guevera Perez	New Mexico Tech	Monte Del Sol
Lillian Petersen	Harvard University	Los Alamos HS
German Rojo	University of Denver	Capital HS



# Scholarship Recipients

	<u>University</u>	<u>High School</u>
Gracie Sanchez	ENMU	Melrose HS
Charles Strauss	Co. School of Mines	Los Alamos HS
Oscar Torres	NMSU	Capital HS
Jerrel White	CNM	Manzano HS



**And the moment we  
have ALL been  
waiting for.....**



**Another  
drum roll,  
please!**

**But First Another**



# Third Place

**Team  
School**

**66, Project CO-OP  
Socorro High**

**Team Members**

**Cody Johnston, Elias Zheng,  
Lucas Ward, Rio Sessions**

**Teacher Sponsor Jay Garcia**



# Second Place

**Team**

**20, Activity-By-Contact Model to  
Predict Enhancer-Gene  
Connections: A Tool to Increase  
our Understanding of Cancer**

**School**

**Los Alamos High**

**Team Member**

**Lillian Petersen**

**Mentor**

**Graham McVicker**





# First Place

**Team  
School**

**59, Modeling Forest Fire Risks in NM  
NM School for the Arts**

**Team Members**

**Rowan Jansens, Madelyn Kingston,  
Maya Landess, Grandon Morrison**

**Teacher Sponsor**

**Mohit Dubey**

**Mentor**

**Stephen Guerin**



# **First Place Winner's**

## **Brief overview of their project**



**And some parting words  
from Paige Prescott...**



We'll  
See  
You  
Next  
Year  
!!!!



Congratulations Seniors!