

Socorro High School 66>

SUPERCOMPUTING CHALLENGE



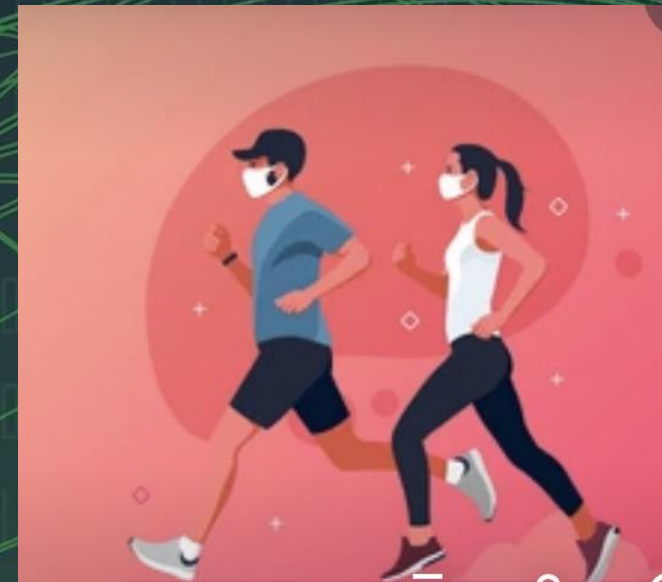
Changing the World
One Line of Code at a Time

April 27, 2021
Via Zoom Webinar

WELCOME TO THE 31st ANNUAL AWARDS CEREMONY



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



**a quick message from Executive Director, Paige
Prescott**

and...

**Thank you to the Student Advisory
Committee for input and guidance this
past year.**



Los Alamos National Laboratory Welcomes You!

John Sarrao

Deputy Director for Science,
Technology, and Engineering at Los Alamos
National Laboratory



New Mexico Consortium



**Thanks to Steve Buelow,
CEO, NM Consortium,
for all his continued
support!**



Consult Welcomes You



Alphabetically

Celia,
David,
Karen,
Patty and
Paige



New Schools to the Challenge This Year

AIMS @ UNM

V. Sue Cleveland High School

Corona High School

Clovis Early College High

Harrison Middle School - APS

Justice Code - Rio & ABQ High

La Cueva High School - APS

San Juan College High

Sandia Prep School

Santa Teresa High School

St. Thomas Aquinas



Presentation 2020-2021 Finalists



Drum Roll, please!

The Finalists

Team #1 *Forecasting Dangerous Levels of Ground Ozone with Machine Learning*

School: V. Sue Cleveland High School

Members: Eliana Juarez, Graciela Rodriguez, Sofia Juarez

Teacher/Sponsors: Ms. Johnston, Ms. Huey

Team # 8 *Machine Learning in Cancer Treatment: A Computational Method to Compile the Most Practical Treatment*

School: Clovis High Early College

Members: Alexis Brandsma, Erynn Vetterly, Tristen Pool



The Finalists

Team #13 *SIN(language) Visualizing Acoustics During COVID-19 with Spatial Signal Processing*

School: New Mexico School for the Arts

Members: Rowan Jansens, Madelyn Kingston, Brandon Morrison

Teacher/Sponsor: Mohit Dubey

Team # 26 *Neuromorphic Computing: Simulating the Brain's Visual Cortex*

School: Los Alamos High School

Member: Robert Strauss

Sponsor: Charlie Strauss



The Finalists

Team # 34 Exploring Simple Spatial Models of River Flooding
School: La Cueva High School
Member: Yana Outkin
Sponsor: Yolanda Lozano

Team # 41 Epidemiology model of Covid-19
School: Los Lunas High
Member: Delsin Jaramillo
Sponsors: Abe Anderson, Creighton Edington



The Finalists

Team # 46 Considerations Factoring in the Speed of CoVID-19 Spread

Schools: Rio Grande High School, Albuquerque High School

Members: Sayra Medrano-Lopez, Ambrosia Moraga, Joylissa Rodriguez

Sponsors: Caia Brown, Becky Campbell, Ryan Palmer

Team # 60 To Catch A Battleship

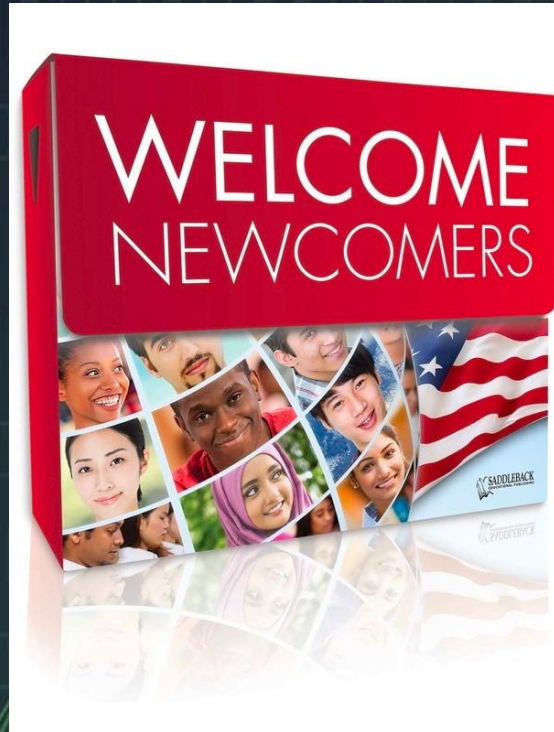
School: Media Arts Collaborative Charter School

Member: Tyler Wyskochil

Sponsor: Tanya Mueller



Newcomer Award



Sponsored by Bob and Peggy Robey



Newcomer Award

Team #60 To Catch a Battleship
School: Media Arts Charter School
Team Member: Tyler Wyskochil
Teacher: Tanya Mueller
Mentors: Creighton Edington,
Harry Henderson



Magellan Award



Sponsored by
Bob and Peggy Robey

Magellan Award



School: St. Thomas Aquinas

Members: Liam Chavez, Emmanuel Padilla, Jacob Soli,
Aubrey Rodela, Vanessa Cichy, Franchesca
Nyberg

Teacher/Sponsor: Mr. Eric Vigil



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 #46 Considerations Factoring in the Speed
CoVID-19 Spread

School: Rio Grande High, Albuquerque High

Team Members: Sayra Medrano-Lopez,
Ambrosia Moraga, Joylissa Rodriguez

Teacher/Sponsor: Caia Brown, Becky Campbell,
Ryan Palmer



**Get out your badge number for a random
prize drawing for finishing this marathon!**



And the winner is

**the prize will be sent to
you shortly!**



Senator Ben Ray Lujan's Innovation in Programming Award



Senator Lujan's Innovation in Programming Award

Team #28 Different Methods for 3D Rendering

School: Los Alamos Middle School

Team Member: Andrew Morgan

Sponsor: Nathaniel Morgan



Shout Out to Alumnae Nick Kutac



Nicholas Kutac, an alumni of Supercomputing Challenge, won the Technical Report Award in 2006. He is now the Supervisor at Puget Sound Naval Shipyard in Bremerton, Washington and works with professional teams on technical writing.



Technical Writing Award





Technical Writing Award

Team #1 Forecasting Dangerous Levels of Ground Ozone with Machine Learning

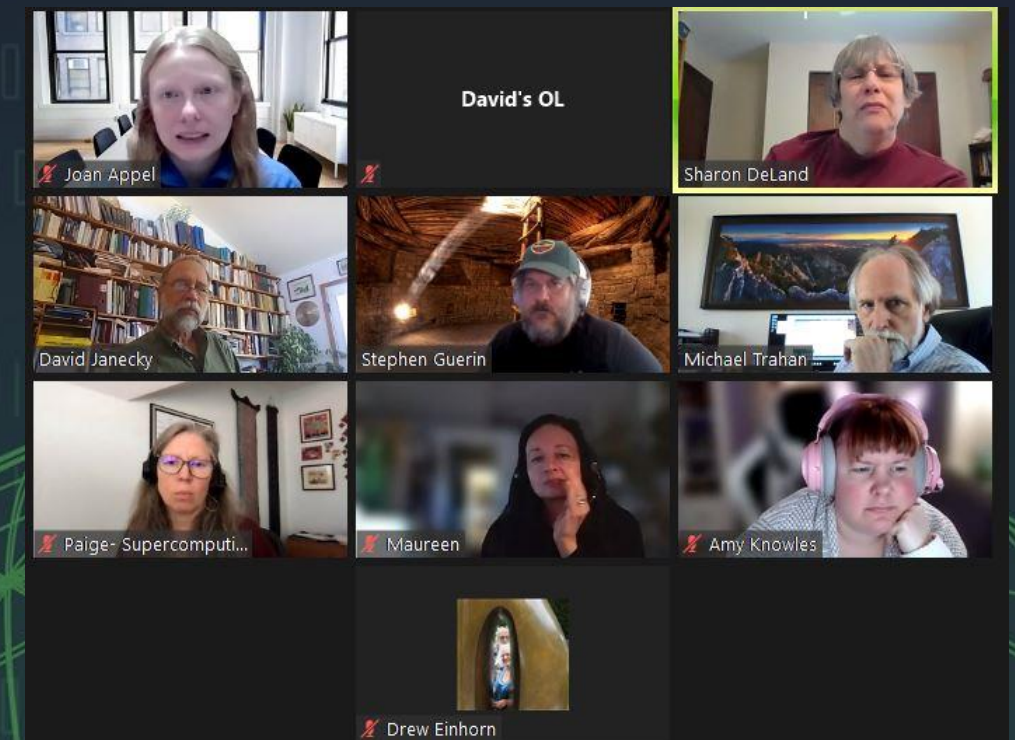
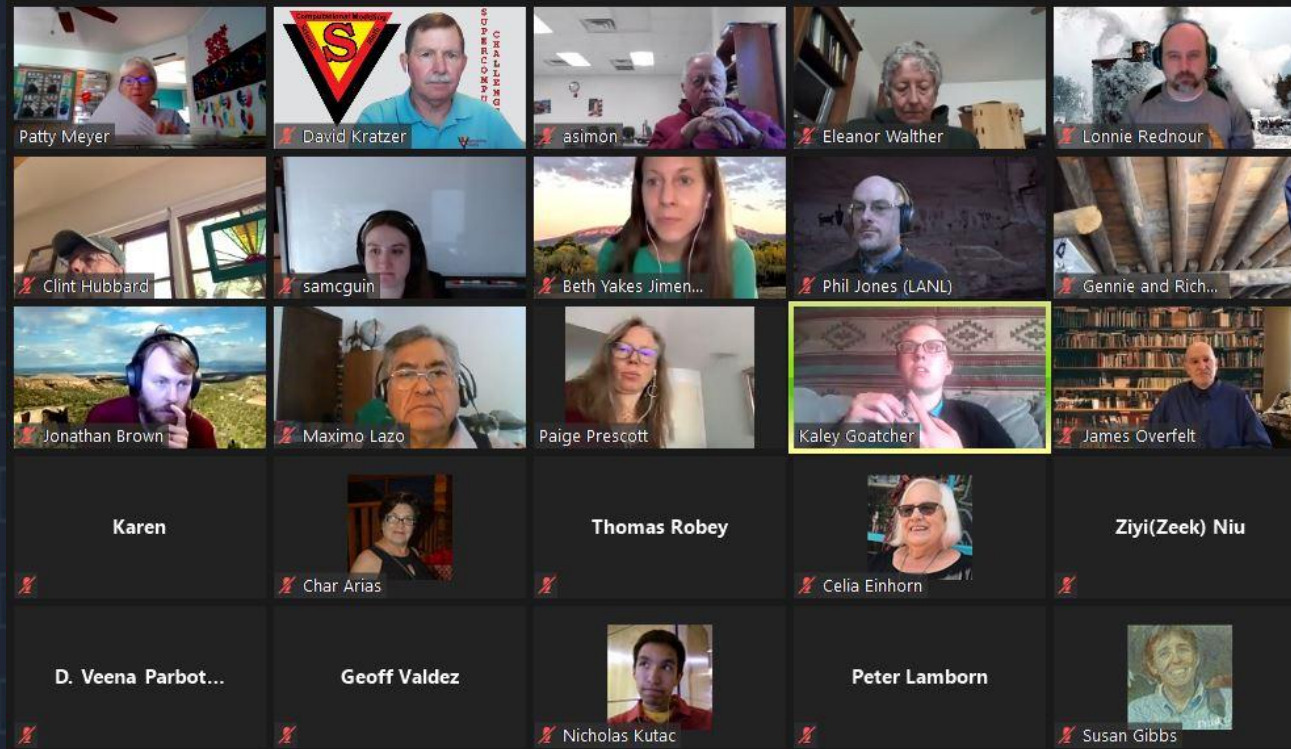
School: V. Sue Cleveland High School

Team Members: Eliana Juarez, Graciela Rodriguez, Sofia Juarez

Teacher/Sponsors: Ms. Johnston, Ms. Huey

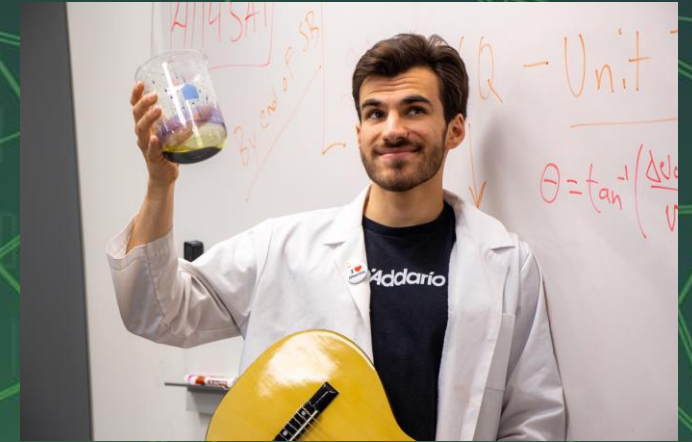


Recognition of Judges



Shout out to Alan Daugherty, Mary Sagartz, Tom Robey, Mohit Dubey

Code Break Team



Community Impact Award



Sponsored by PNM



Community Impact Award



Team #56 Police and Citizen Interactions
School: Saturday Science and Math Academy
Team Members: Vashti Grant, Judie Oyinatumba,
Kay Polston
Sponsor: Ryan Palmer



Middle School Award



Sponsored by Gina Bandoni, Windspirit



Middle School Award

Team #45 Ocean/Acequia Pollution

School: Harrison Middle School

Team Members: Elian Diaz, Adamaris Hernandez,
Dominic Mata, Homero Rascon,
Daisy Ordonez, Victor Gonzalez

Sponsors: Ryan Palmer, Caia Brown, Rebecca Campbell



Teacher Appreciation Award

Thanks!



Sponsored by Shaun Cooper



BE BOLD. Shape the Future.
New Mexico State University



Teacher Appreciation Award

Recipient



Barbara Tetrycz
Capital High
Santa Fe

Special shout out to
Creighton Edington for his
mentoring this year!

Sponsored by Shaun Cooper



BE BOLD. Shape the Future.
New Mexico State University



Cybersecurity Award

**Sponsored by
Mark Fidel**



Cybersecurity Award

Team #10 unCAPTCHA: AI Recognition of Distorted Text in Images

School: Capital High, Santa Fe

Team Members: Hansel Chavez, Jonathan Garcia,
Manuel Bojarquez, Isel Aragon

Teacher/Sponsor: Irina Cislaru , Barbara Teterycz

Mentor: Dr. Przemek Wozniak (LANL)



Furthering Education through Technology



NMTIE Research Award

NMTIE

Furthering Education through Technology

Team #46 Considerations Factoring in the Speed of
CoVID-19 Spread

Schools: Rio Grande High School, Albuquerque High School

Team Members: Sayra Medrano-Lopez,
Ambrosia Moraga, Joylissa Rodriguez

Sponsors: Caia Brown, Becky Campbell, Ryan Palmer



Shout Out to Tom Robey



Tom Robey is a reviewer, a mentor, a teacher, a tutor, a judge, a father, a twin brother, a computer programmer, and an advocate for the Challenge. We salute him for his expertise, availability and friendship.



NMTIE Teamwork Award

NMTIE

Furthering Education through Technology



NMTIE Teamwork Award

NMTIE

Furthering Education through Technology

Team #3 Keeping Personal Assistant Devices Secure at Home: The Google Home Mini (GHM)

Schools: Eldorado High School/Manzano High School

Team Members: Nancy Avila, Candis Canaday,
Gwenevere Caouette, Kyreen White

Teacher/Sponsor: Sharee Lunsford, Karen Glennon



Creativity and Innovation Award



Creativity and Innovation Award



Team #34 Exploring Simple Spatial Models of River
Flooding

School: La Cueva High School

Team Member: Yana Outkin

Teacher/Sponsor: Yolanda Lozano



Equity and Access Award Sponsored by Consult



Equity and Access Award

Harrison Middle School Colleagues

Caia Brown, Rebecca Campbell, and Ryan Palmer

Passionate models of lifelong learning and teaming, engaging students in new content, in unique ways.

Honored with a donated laptop to support coding club and summer STEAM-L camps.



Numbers Please!



There is no Logo for Next Year! (yet)

2021-22

The Consult team
will accept entries this
summer until Aug. 1st.



New Mexico Network for Women in Science and Engineering



New Mexico Network for Women in Science and Engineering



**Team #51 Using Hemispheric Sensing with Trajectory
Prediction to Mechanically Dodge Space
Debris**

School: AIMS - UNM

Team Member: McKenna Collins

Sponsor: Creighton Edington



Environmental Modeling



Environmental Modeling

Team **#20 Effects of Ozone Depletion on Humans**
School: **NMMI**
Team Members: **Ryan Lee, Jaejoon Lee, Yoo Younggun**
Sponsor: **Mark Stone**



Human Computer Interaction

Sponsored by
Stephen Guerin, SimTable



Human Computer Interaction

Sponsored by
Stephen Guerin, SimTable



Team

School:

Team Members:

#24 Technology for a Combat Drone

Los Alamos High School

Daniel Kim, Andres Iturregui



Judges



Expo Judges' Special Award

Heart, Drive for Success

Team #15 Simulating Pleistocene Park
School: Monte del Sol Charter School
Team Members: Brooklyn Martinez, Isabella
Martinez, Kaley Martinez



Expo Judges' Special Award

Urban Impact

Team #57 Traveling on the Road
School: Saturday Science and Math Academy
Team Members: Isaac Rankin, McLight Emma-Asonye,
Kingsley Walker
Sponsor: Caia Brown



Expo Judges' Special Award

Economics

Team #4 Relationship Between Employment and Automation

Schools: Cottonwood Classical/Del Norte High School

Team Members: Ayvree Urrea, Kiara Onomoto

Teacher/Sponsor: Karen Glennon, Patty Meyer



Finalist Judges' Special Award

Leadership Through Computing

Team **#41 Epidemiology model of CoVID-19**

School: **Los Lunas High School**

Team Member: **Delsin Jaramillo**

Sponsor: **Abe Anderson**



Finalist Judges' Special Award

Machine Learning

**Team #8 Machine Learning in Cancer Treatment:
A Computational Method to Compile the
Most Practical Treatment**

School: Clovis High Early College

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



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



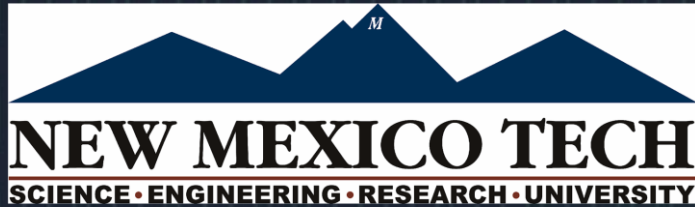
Silver Partners



Bronze Partners



Educational Partners



BE BOLD. Shape the Future.
New Mexico State University



Scholarship Recipients



Scholarship Committee

Hope Cahill, Creighton Edington,
and Dana Roberson

Scholarship Recipients

High School

University

Hansel Chavez

Capital High

CNM

McKenna Collins

AIMS @ UNM

UNM

Evelyn Garrett

House High

ENMU

Delsin Jaramillo

Los Lunas High

NM Tech



Scholarship Donors

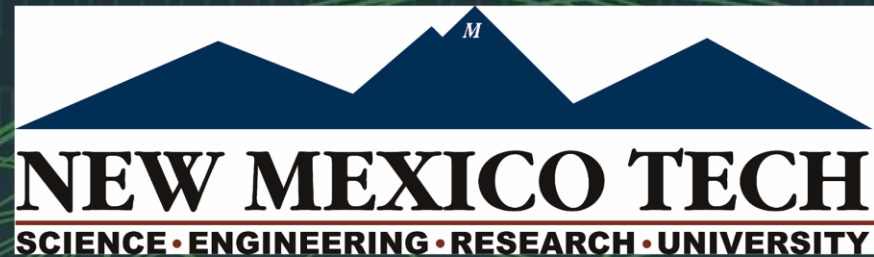
**EASTERN
NEW MEXICO
UNIVERSITY**



BE BOLD. Shape the Future.
New Mexico State University



**AIR FORCE RESEARCH
LABORATORY**



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

**Another
drum roll,
please!**



But First Another



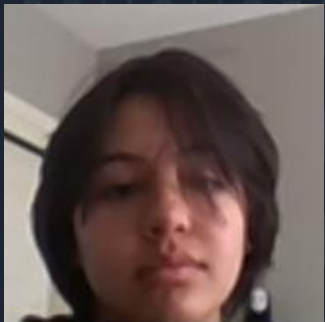
Third Place

Team #1 Forecasting Dangerous Levels of
Ground Ozone with Machine Learning

School: V. Sue Cleveland High School

Team Members: Eliana Juarez, Sofia Juarez,
Graciela Rodriguez

Teacher/Sponsors: Ms. Johnston, Ms. Huey



CONGRATULATIONS!



Second Place

Team #13 SIN(language) Visualizing Acoustics During CoVID-19 with Spatial Signal Processing

School: New Mexico School for the Arts

Team Members: Rowan Jansens,
Madelyn Kingston,
Brandon Morrison

Teacher/Sponsor: Mohit Dubey



GOOD WORK!



First Place

Team #26 Neuromorphic Computing:
Simulating the Brain's Visual Cortex

School: Los Alamos High School

Team Member: Robert Strauss

Sponsor: Charlie Strauss



WONDERFUL ACHIEVEMENT!!



First Place Winners

Brief overview of their project



We'll see you
next year!!!!



Congratulations Seniors!
We look forward to you coming back
to be an alumni supporter!

