Welcome to the **36th** Annual Awards Ceremony

Computational Modeling
Science
Math
Supercomputing Challenge

Supercomputing Challenge

You Took the Challenge!
You Finished the Marathon!

Los Alamos National Laboratory Welcomes You!

Kathy Keith
Director
Community Partnerships Office

Supercomputing Challenge

Consult Welcomes You!

Alphabetical by first name:
David, Karen, Patty

Computational Modeling Science Math
Supercomputing Challenge

Congratulations to the 2025-2026 Finalists Teams!

The Finalists

Albuquerque Academy

Understanding 3D Printing Through Atomistic Polylactic Acid Segmental Dynamics Analysis

Team Member: Harrison Schiek

Sponsors: Jay Garcia

Mentor: Michael Chandros

Computational Modeling Science Math Supercomputing Challenge

The Finalists

Los Alamos High School

Dust Busters: The Effects Of Dust Scattering On Observations Of X-ray Binaries

Team member:	Tate Plohr
Sponsor:	JeeYeon Plohr
Mentor:	Greg Salvesen

Supercomputing Challenge

The Finalists

Los Alamos High School

Collective Intelligence: Driving Lessons from Ants

Team Member: Linus Plohr

Supercomputing Challenge

The Finalists

Santa Fe Preparatory School

Pacing Optimization for Cycling Performance Through Neural Evolution

Team Member: Jaden Rand

Sponsor: Jocelyne Comstock

Supercomputing Challenge

The Finalists

Santa Fe Preparatory School

Development of an Open-Source, High-Precision N-Body Solar-System Gravitational Simulation

Team: Marlow Lichty, Nik Szczepanski

Sponsor: Jocelyne Comstock

The Finalists

Welch Home School

Application of Game Theory to Analysis of Machine Versus Human Strategies

Team Members: Helena Welch
Kalliope Luna Welch

Sponsor: Cindy Welch

Mentor: Paul Welch

Supercomputing Challenge

NetLogo Agent Based Model

Presented
On Behalf of
Simtable

NetLogo Agent Based Model

New Futures
Fighting Shadows

Team Members: Nadia Montano, Jazmin Aquino

Teacher/Mentor: Rachel Kilman

Supercomputing Challenge

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

The winner is….

Supercomputing Challenge

Excellence in Teamwork Award

Sponsored by New Mexico Technology In Education

Presented by Kaley Woelfel

Excellence in Teamwork Award

New Mexico NMTIE Technology In Education

Santa Fe Preparatory School

Development of an Open-Source, High Precision N-body Solar System Gravitational Simulation

Team: Marlow Lichty, Nik Szczepanski

Sponsor: Jocelyne Comstock

Computational Modeling Science Math Supercomputing Challenge

Excellence in Research Award

Sponsored by New Mexico Technology In Education

Presented by Kaley Woelfel

Excellence in Research Award

New Mexico NMTIE Technology In Education

New Mexico Academy for the Media Arts

When Will New Mexico Run out of Water?

Team: Eduardo Dorado, Anasofia Rodriguez, Zaaliyah Thomas
Sponsor: Tanya Muller

Computational Modeling Science Math Supercomputing Challenge

Human Computer Interaction Award

Sponsored by

Stephen Guerin

Simtable

Supercomputing Challenge

Human Computer Interaction Award

Justice Code
CommuniEats

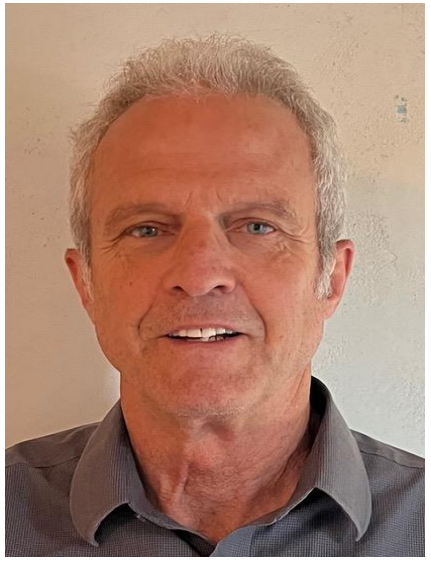
Team: Mekhi Bradford

Sponsor: Becky Campbell

Supercomputing Challenge

Head Judges

Richard Barrett



Kaley Woelfel

Supercomputing Challenge

Recognition of Expo Judges

Hats off to our 22 Expo and Finalist Judges from Challenge Alums, Grad Students, National Labs, Nonprofits, Small and Large Businesses.

Please stand up and take a bow!

Computational Modeling Science Math Supercomputing Challenge

Recognition of Expo Judges

Ed Angel
Gennie Barrett
Richard Barrett
Melany Cordova
Rusty Davis
Umanga De Silva
Clint Hubbard
Omar Ishak
Carene Larmat
Scott Levy
Monique Morin
James Overfelt
Paige Prescott
Mario Serna
Lee Rand
Lonnie Rednour
Eleanor Walther

Computational Modeling
Science
Math
Supercomputing Challenge

Finalist Judges

Daniel Appel	USAF / MTSI
Joan Appel	Flatiron Health
Phil Jones	Los Alamos National Labs/Retired
Kasra “Kaz” Manavi	Simtable
Kaley Woelfel	AV

Supercomputing Challenge

Environmental Modeling Award

Presented by Vangie Trujillo

Environmental Modeling Award

New Mexico Academy for the Media Arts

When Will New Mexico Run Out of Water

Team: Eduardo Dorado, Anasofia Rodriguez, Zaaliyah Thomas

Sponsor: Tanya Mueller

Community Impact Award

Presented by Umanga De Silva

Computational Modeling Science Math
Supercomputing Challenge

Community Impact Award

New Futures School
Fighting Shadows

Team: Nadia A. Montano, Jazmin N. Aquino
Sponsor: Rachel Kilman, Kelly Lasater, Soni Buda-Thornburgh
Mentor: Richard Barrett

Creativity and Innovation Award

Presented by
Tim Thomas
Sandia Laboratories

Creativity and Innovation Award

Santa Fe Preparatory School

Identifying Piano Composers from MIDI Files Using Machine Learning

Team: Ari Chan-Chiu

Sponsor: Jocelyne Comstock

Supercomputing Challenge

Middle School Award

Presented by Karen Glennon

Supercomputing Challenge

Middle School Award

Albuquerque Academy
Do GLP1 agonists, a new weight loss drug, cost us muscle? A Python simulation study

Team: Zoheb Barrantes

Sponsor: Arfa Khan

Computational Modeling Science Math
Supercomputing Challenge

Magellan Award
An Explorer and a Risk Taker

Supercomputing Challenge

Magellan Award
An Explorer and a Risk Taker

New Futures School
Fighting Shadows

Team: Nadia Montano, Jazmin Aquino
Sponsor: Rachel Kilman, Kelly Lasater,
Soni Buda-Thornburgh
Mentor: Richard Barrett

Computational Modeling Science Math
Supercomputing Challenge

Teacher Appreciation Award

Teaching is the greatest act of optimism

Supercomputing Challenge

Teacher Appreciation Award

Mekhi Bradford please come to the stage.

Supercomputing Challenge

NUMBERS PLEASE!

Supercomputing Challenge

LOGO FOR NEXT YEAR!
2026-2027

Presented by
David Kratzer

And the LOGO is

Supercomputing Challenge

LOGO for Year 2026-2027

Santa Fe Preparatory School

Team: Luke Rand, Isaac Olson

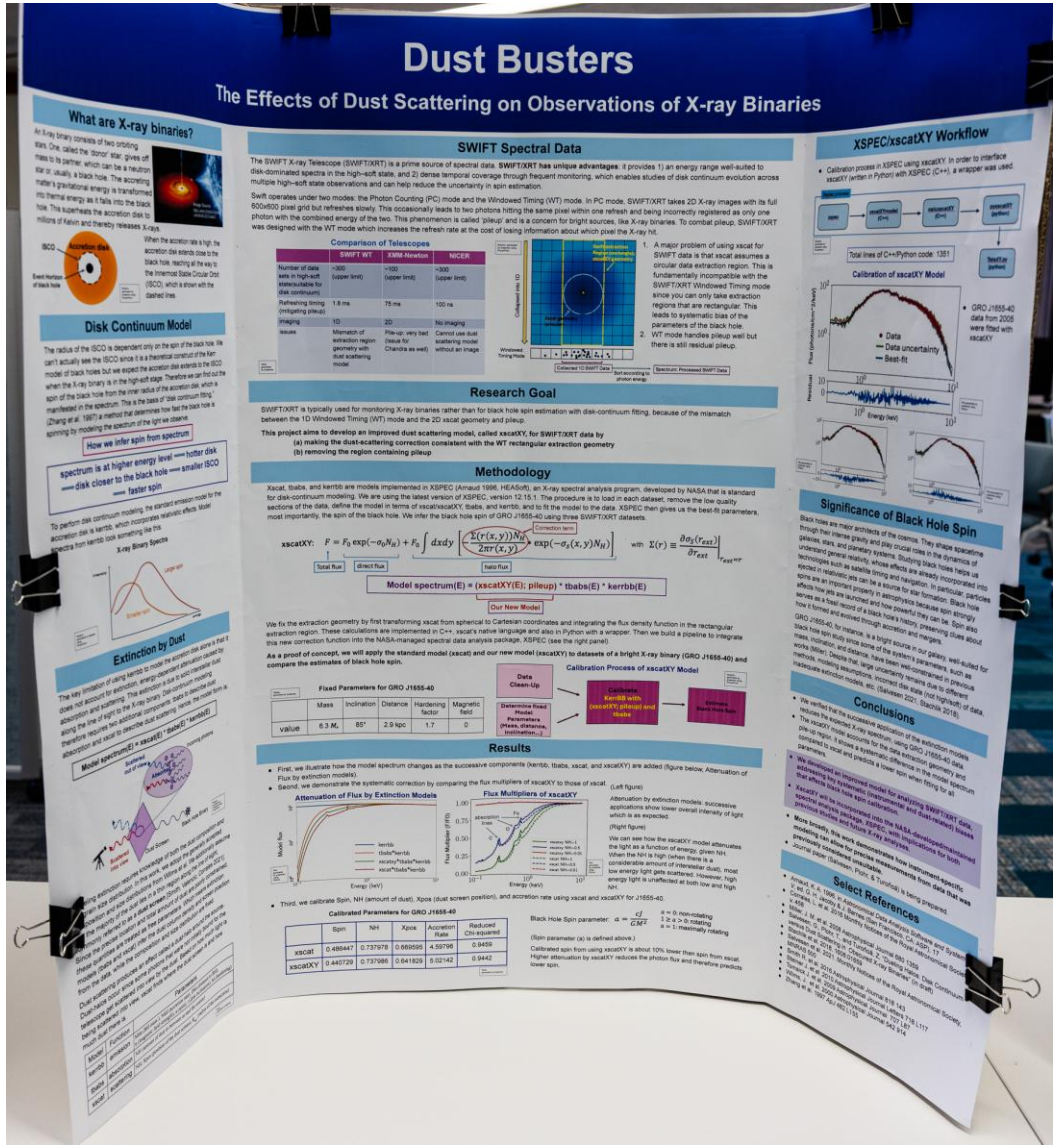
Sponsor: Jocelyne Comstock

Supercomputing Challenge

Technical Poster Award

Supercomputing Challenge

Technical Poster Award



Los Alamos High School
Dust Busters: The Effects of Dust Scattering on Observations of S-Ray Binaries

Team: Tate Plohr
Sponsor: JeeYeon Plohr

Supercomputing Challenge

Crowd Favorite

Presented by

Karen Glennon

Supercomputing Challenge

Crowd Favorite Award

Truman Middle School

Sentinel Guard: Rover + AI for Rapid Wildlife Identification

Team: Brian Rios, Abraham Montijo, Karin Urbina

Sponsor: Natali Barreto Baca

Supercomputing Challenge

New Mexico Network for Women in Science and Engineering

Presented by Cheri Burch NMNWSE

Computational Modeling Simulation Visualization
Supercomputing Challenge

New Mexico Network for Women in Science and Engineering

Albuquerque Academy

Low-Cost Raspberry Pi & Molecular Simulations for Microplastic-Drug Classification via LF

Team Member: Ahana Koushik

Sponsor: Jay Garcia

Supercomputing Challenge

Longevity Award

Presented by David Kratzer

Longevity Award

Congratulations to

Mekhi Bradford

Computational Modeling Science Math Supercomputing Challenge

Professional Presentation

Presented by Tim Thomas

Professional Presentation

Congratulations to

Albuquerque Academy
Understanding 3D Printing Through Atomistic Polylactic Acid Segmental Dynamics Analysis

Team: Harrison Schiek

Sponsor: Jay Garcia

Supercomputing Challenge

Technical Writing Award

Presented by Kaley Woelfel

Technical Writing

Congratulations to

Welch Home School

Application of Game Theory to Analysis of Machine Versus Human Strategies

Team Members: Helena Welch
Kalliope Luna Welch

Sponsor: Cindy Welch

Mentor: Paul Welch

Computational Modeling Science Math Supercomputing Challenge

High Performance Computing Award

Presented by Mario Serna

High Performance Computing

Congratulations to

Albuquerque Academy

Understanding 3D Printing Through Atomistic Polylactic Acid Segmental Dynamics Analysis

Team member: Harrison Schiek

Sponsor: Jay Garcia

Supercomputing Challenge

Judges' Special Awards

Presented by
Richard Barrett and Kaley Woelfel

Supercomputing Challenge

Judges' Special Award
Shark Tank

Santa Fe Preparatory School

Pacing Optimization for Cycling Performance Through Neural Evolution

Team Members: Jaden Rand
Sponsor: Jocelyne Comstock

Judges' Special Award
Best Agent Based Modeling

Los Alamos High

Collective Intelligence: Driving Lessons from Ants

Team: Linus Plohr

Mentor: JeeYeon Plohr

Supercomputing Challenge

Judges' Special Award
Health Awareness

Capital High School

PFAS Chemicals in School Water

Team: Dafne Ramirez Guajardo, Briana Ramirez

Sponsor: Irina Cislaru

Judges' Special Award
Science Rocks

Santa Fe Preparatory School

SCORAV: Single-Camera Off-Road Autonomous Vehicle

Team: Luke Rand, Isaac Olson

Sponsor: Jocelyne Comstock

Supercomputing Challenge

Judges' Special Award
Significant Engineering Efforts

Capital High

AVALANCHERS: Detection Device for Finding People After an Avalanche

Team: David Chavez, Raul Alvarado Villalobos, Angel Vega, Antonio Baca

Sponsors: Barbara Teteryez, Irina Cislaru

Supercomputing Challenge

Sponsor Recognition

Kudos for our sponsors!!

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

Supercomputing Challenge

Primary Partners

- Los Alamos National Laboratory
- Triad National Security, LLC
- NMSU STEM Innovation Network

Gold Partners

- Sandia National Laboratories

Supercomputing Challenge

Silver Partners

*Gulf Stream Group and bigbyte.cc
* Westwind

Bronze Partners

* New Mexico Technology in Education (NMTIE) in conjunction with NMCHECS
* Simtable/Redfish Group

Supercomputing Challenge

Educational Partners

- The Center for Connected Learning CCL and Computer-Based Modeling/NetLogo
- Central New Mexico Community College
- CNM Ingenuity, Inc.
- Eastern New Mexico University
- MIT Starlogo Nova
- New Mexico Highlands University

Supercomputing Challenge

Educational Partners Continued

- New Mexico Institute of Mining and Technology
- New Mexico Public Education Department
- New Mexico State University
- Northern New Mexico College
- San Juan College
- Santa Fe Community College
- University of New Mexico
- UNM CARC, Center for Advanced Research Computing

Supercomputing Challenge

Friends of the Challenge

- Computer Science Alliance
- Creighton Edington
- Daniel and Mel Fuka
- Clint Hubbard
- David Janecky

Computational Modeling Science Math
Supercomputing Challenge

Friends of the Challenge, Continued

- Hugo Rivera Calzadillas
- Dave Ritter
- Maximo Lazo
- NM Network for Women in Science and Engineering

Computational Modeling Science Math Supercomputing Challenge

You too can be a Challenge Sponsor!

Support the Supercomputing Challenge when you shop!

Visit http://www.smithsfoodanddrug.com/inspire. Search for Supercomputing Challenge either by name or MY603 and then click Enroll.

New users need to create an account requiring some basic information, a valid email address and a rewards card.

Over $500 this year!!

Supercomputing Challenge

Scholarship Recipients

Scholarship Committee

Hope Cahill, **Creighton Edington**,

And **Anneliese Ward**

Computational Modeling Science Math
Supercomputing Challenge

Scholarship Recipients

NAME	COLLEGE	HIGH SCHOOL
Jazmin Aquino	CNM & UNM	New Futures HS
Antonio Baca Archuleta	SFCC/NMTech	Capital HS
Nevaeh Birner	CNM	New Futures HS
Dafne Ramirez-Guarjardo	NMTech	Capital HS

Supercomputing Challenge

Scholarship Recipients

NAME	COLLEGE	HIGH SCHOOL
Marlow Lichty	Harvey Mudd	Santa Fe Prep
Briana Ramirez	UNM	Capital HS
Helena Welch	Out of State	Welch Home School

Supercomputing Challenge

And the moment we have ALL been waiting for ……

Another
Drum roll,
Please!!

Supercomputing Challenge

BUT FIRST -----

Supercomputing Challenge

For Real this Time…….

Our Third Place Winner is …….

Another Drum roll, please!

THIRD PLACE

Albuquerque Academy

Understanding 3D Printing Through Atomistic Polylactic Acid Segmental Dynamic Analysis

Team Member: Harrison Schiek
Sponsors: Jay Garcia
Mentor: Michael Chandros

CONGRATULATIONS!

Supercomputing Challenge

Our Second Place Winner is……

DRUM ROLL PLEASE!

Supercomputing Challenge

SECOND PLACE

Santa Fe Preparatory School
Pacing Optimization for Cycling Performance Through Neural Evolution

Team Member: Jaden Rand
Sponsor: Jocelyne Comstock

WELL DONE!!

Supercomputing Challenge

The moment we've all been waiting for

Our First Place Winner is ……

FIRST PLACE

Los Alamos High School

Dust Busters

Team member: Tate Plohr
Sponsor: JeeYeon Plohr
Mentor: Greg Salvesen

VERY NICE WORK!!

Computational Modeling Science Math Supercomputing Challenge

FIRST PLACE WINNERS

Brief overview of their project!

Go for it!!

Closing Comments from our Executive Director David Kratzer

Computational Modeling Science Math
Supercomputing Challenge