Welcome to the 2015 Annual Awards Ceremony

April 21, 2015

You took the Challenge!

You finished the Marathon!

Master of Ceremonies

Shaun Cooper,

Supercomputing Challenge,
Past Member of the Board of Directors
Retired NMSU CIO
College Assistant Professor, CS, NMSU

LANL Welcomes You!

Presentation of the 2014 - 2015 Finalists

David Kratzer, Consult

The Finalists

Team 3, Albuquerque Academy
Team 4, Albuquerque Academy
Team 39, Las Cruces High
Team 108, Las Cruces YWiC
Team 46, Los Alamos High
Team 57, Los Alamos High
Team 59, Los Alamos Mid
Team 63, Los Alamos Mid
Team 91, Monte Del Sol
Team 123, Santa Fe High

I Took the Challenge!
Welcome Back

John Paul Gonzales,
Santa Fe Institute & Project GUTS

Welcome Back

- Deming HS
- Monte del Sol HS
- Portales HS

Crowd Favorite

Presented by

Lydia Tapia, UNM

Crowd Favorite

Winners: Team 79, Melrose Junior High, *Arrow Aerodynamics*

Team Members: James Hudson, Cooper Roberts, Teigan Delk, Nathaniel Flores

Sponsor: Alan Daugherty

Professional Presentation

Presented by

Carole Rutten,
Los Alamos National Security

Professional Presentation

Winners: Team 126, School of Dreams Academy, *Counterintuitive Strategy for Application in Game Theory*

Team Members: James Edington, Noah Gelinas, Jonathan Zack Daniels

Sponsor: Eric Brown

Agent-based Model using NetLogo Award

Presented by

Uri Wilensky, Creator of NetLogo

(via Skype)

Agent-based Model using NetLogo Award

Winners: **Team 91,** Monte del Sol, *Using a Concentrated Heat System to Shock the P53 Protein to Direct Cancer Cells into Apoptosis*

Team Members: Meghan Hill, Katelynn James

Sponsor: Rhonda Ward

Los Alamos National Laboratory Environmental Modeling Award

Presented by

David Janecky, LANL

Los Alamos National Laboratory Environmental Modeling Award

Winners: Team 59, Los Alamos Middle School, *How is the Climate Changing Across the United States*

Team Members: Lillian Petersen

Sponsor: Mark Petersen

Work Worth Doing Award

Microsoft

Presented by

Thomas Bowles, Challenge Board of Directors

Sponsored by

Matt Wallaert, Microsoft

Work Worth Doing Award

Winners: Team 22, Down to Earth School, *Bike Lanes, Helping to Decrease Dependence*

Team Members: Simone Hill, Analyse Waldron

Sponsor: Maia Chaney, Shanon Muehlhausen

Work Worth Doing Award

Winners: Team 84, Mesa Middle, *Lock Downs*

Team Members: Jada Martinez, Selina Ibarra

Sponsor: Tracie Mikesell

New Mexico EPSCoR

Research Award

NM Water/Energy

Presented by

Tim Thomas, Challenge Board

Research Award
NM Water/Energy

Winners: Team 88, Miyamura High,
Factors Effecting Solar Power Production Efficiency

Team Members: Ericson Gordo, Nashat Khalaf, Tyler Strangeowl

Sponsor: Rowina Dolina

Human-Computer Interaction Model Award

Presented by

Nicolas Maestas,

Ben Ray Lujan Constituent Liaison

Sponsored by

Simtable/Redfish Group

Human-Computer Interaction Model Award

Winners: Team 108, Las Cruces YWiC, *An Interactive System for Deaf and Hearing Impaired Children*

Team Members: Hiba Muhyi, Kaitlyn Mason

Sponsor: Rebecca Galves, Daniela Miranda

Technical Writing Award

Presented by

Mia Kalish, NMSU,
Researcher w/ Math and Physical Science Dept.

Sponsored by

Pallis Communication, LLC

Technical Writing Award

Winners: Team 91, Monte de Sol,
Using a Concentrated Heat System to Shock the P53 Protein to Direct Cancer Cells into Apoptosis

Team Members:

Meghan Hill and Katelynn James

Sponsor: Rhonda Ward

Recognition of Judges

Michael Trahan
Sandia National Laboratories
Principal Member of Technical Staff,
Integration and Test, Group # 5515

Eleanor Walther
Sandia National Laboratories, Retired

Community Impact Award

Presented by

Ron Davis, ABBA

Community Impact Award

Winners: Team 83, Mesa Middle School, *Project Egress*

Team Members: Adrian Gomez, Sarai Guerrero, Leah Guerrero

Sponsor: Tracie Mikesell

Community Impact Award

Winners: **Team 20,** Desert Academy, *Cyber-Security at Desert Academy*

Team Members: Jonas Kaare-Rasmussen, Lileigh Thomas

Sponsor: Jocelyne Comstock, Jeff Mathis

Southwest Ecosystems Award

Presented by

Gary Romero, Interim
Executive Director of NMMNHS

Southwest Ecosystems Award

Winners: Team 69, Melrose High, ***Pasture-ization 2.0***

Team Members: Ethan Wright

Sponsor: Alan Daugherty

Southwest Ecosystems Award

Winners: Team 74, Melrose High, ***It's a Bird, It's a Plane, It's Super Silage II!!!***

Team Members: Maggie Martin, Hannah Wofford, Rebecca Rush

Sponsor: Alan Daugherty

Newcomer Award

Presented by

Peggy and Bob Robey

Newcomer Award

Winners: Team 1021, Saturday Science and Math Academy, *Slowing the Spread of Malaria*

Team Members: Matuke Fomukong, Naomi Rankin

Sponsor: Debra Johns

Magellan Award

Presented by

Peggy and Bob Robey

Magellan Award Winners

Winners: Team 31, Gadsden Mid,
Ebola Outbreaks within Populations

Team Members: Adrian Fernandez, Kevin Bernal, Anselmo Miguel Varela

Sponsor: Danielle McFarland

Web Presentation of Final Report Award

Presented by

Matt Miller,

Senator Udall's staff

Web Presentation of Final Report Award

Winners: Team 49, *Los Alamos High, The Next Step in the Printing Evolution*

Team Members: Connor Bailey, Victor Kim, Hayden Walker

Sponsor: Adam Drew

Senator Martin Heinrich's Middle School Award

Presented by

Katie Richardson,
Field Representative for U.S. Senator
Martin Henrich

Senator Martin Heinrich's Middle School Award

Winners: Team 59, Los Alamos Middle, *How is the Climate Changing Across the United States*

Team Members: Lillian Petersen

Sponsor: Mark Petersen

CHECS Research Award

Presented by

Shaun Cooper,

College Assistant Professor,

CS, NMSU

CHECS Research Award

Winners: Team 89, Miyamura, *The Effects of Motivation for a Healthy Lifestyle*

Team Members: Nicole Atencio, Steven Chase, Willard Hubbard

Sponsor: Rowena Dolino

CHECS Teamwork Award

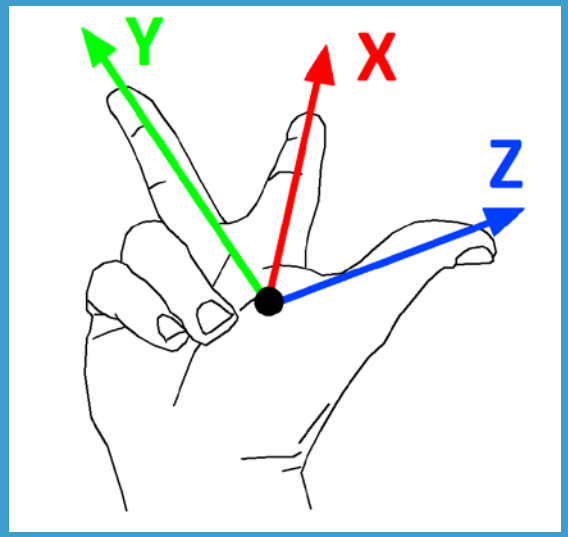
Presented by

Shaun Cooper

CHECS Teamwork Award

Winners: Team 39, Las Cruces High
P.A.V.L Personal Assistance for the Visually Limited
Team Members: Grace Cowie, Mollyanne Hurd, Vladislav Sevostianov
Sponsor: Elisa Cundiff

Right-Hand Man Award



Presented by

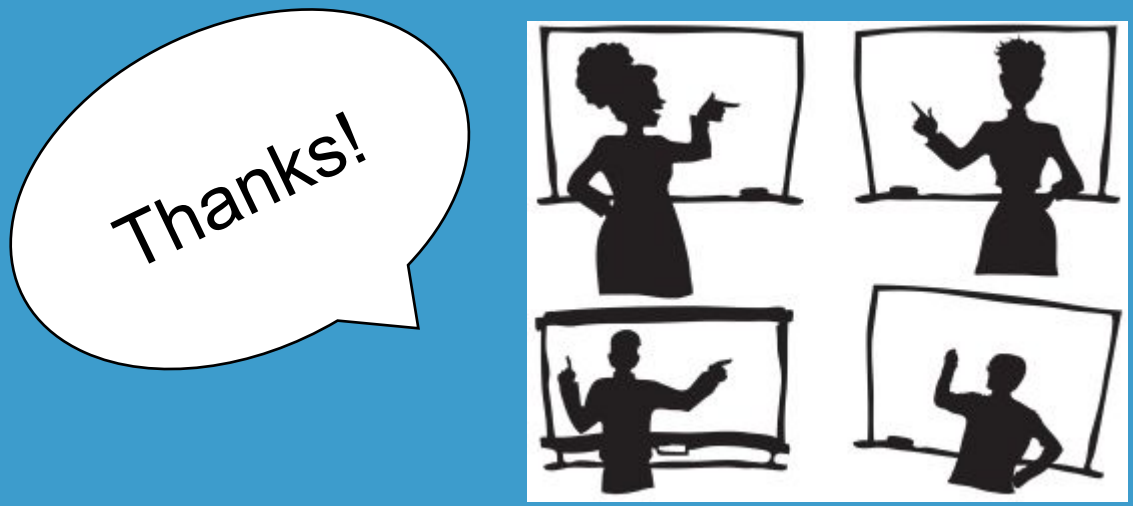
Patty Meyer and Celia Einhorn

Right-Hand Man Award

Winner: Chris Koch

Best of luck to Chris Koch who will be starting work with Google!

Teacher Appreciation Award



Presented by

Meghan Hill and

Kayelynn James

Teacher Appreciation Award

Winner:

Rhonda Ward

Monte del Sol

Teacher Appreciation Award

Presented by

Hannah and Bella Montoya

Teacher Appreciation Award

Winner:

Karen Glennon,
Jackson Middle School

Mentor Appreciation Award

Presented by

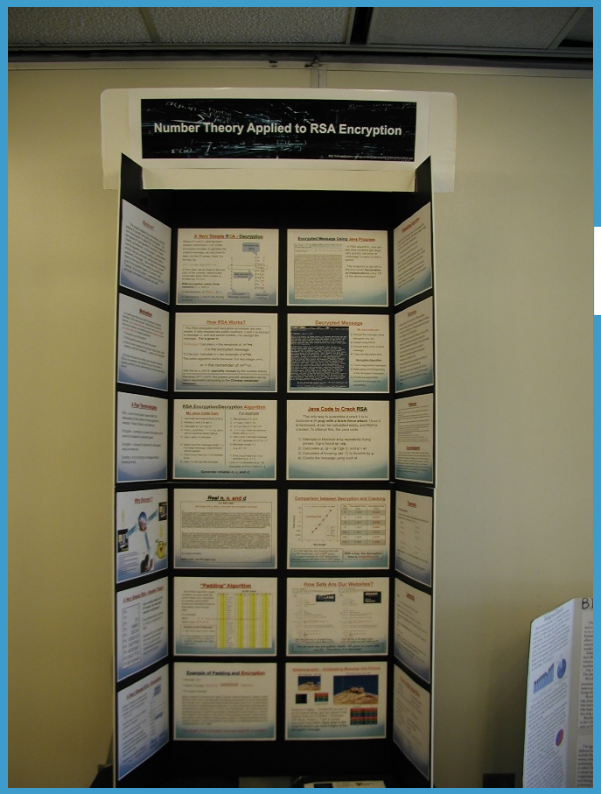
Thomas Curtain, St. Pius X

Mentor Appreciation Award

Winner:

Jordan Medlock, Challenge Alum, UNM

Supercomputing Challenge Technical Poster Award



Presented by

Bethany O' Farrell and

Beau Brown

Technical Poster Award

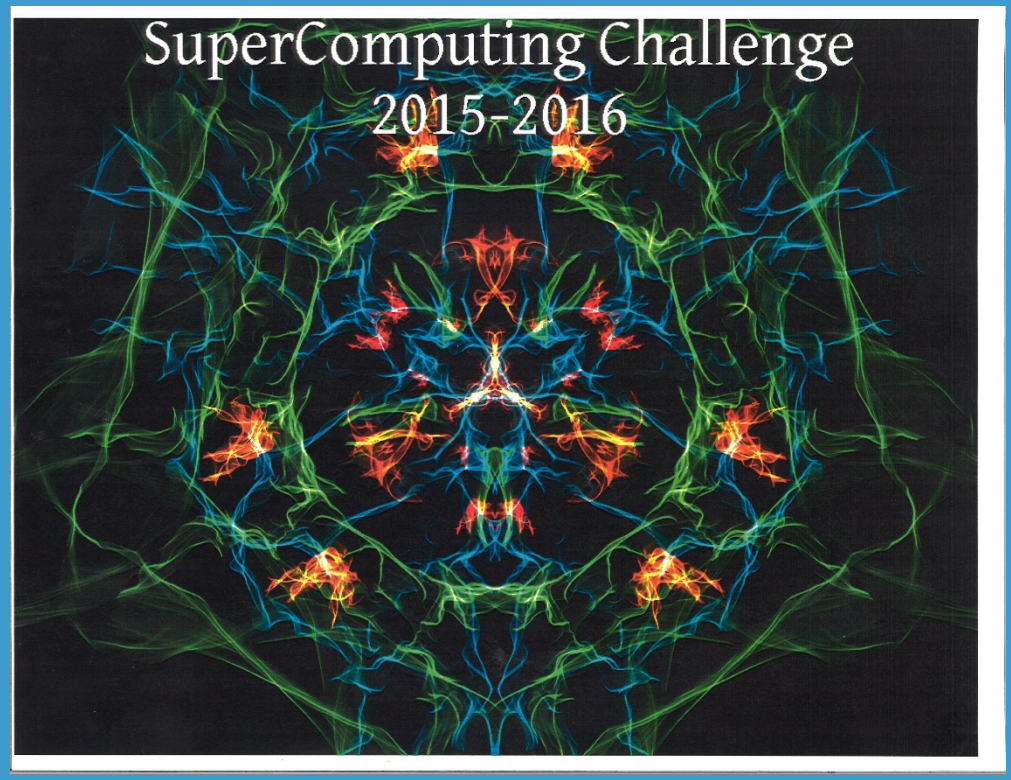
Winners: Team 46, Los Alamos High, *Number Theory Applied to RSA Encryption*

Team Members: Jovan Zhang

Sponsor: Adam Drew

Graphical Poster Award

Supercomputing Challenge Logo for 2015-2016



Graphical Poster Award

Winners: Team 22, Down to Earth, *Bike Lanes, Helping to Decrease the Dependence*

Team Members: Simone Hill, Analyse Waldron

Sponsor: Maia Chaney, Shanon Muelhausen

New Mexico Network for Women in Science and Engineering

Presented by

Eleanor Walther,
Sandia National Labs (Retired)

New Mexico Network for Women in Science and Engineering

Winners: Team 39, Las Cruces High, *P.A.V.L: Personal Assistance for the Visually Limited*

Team Members: Grace Cowie, Mollyanne Hurd, Vladislav Sevostianov

Sponsor: Elisa Cundiff

Science Rocks

Presented by

Eli Echt-Wilson and Albert Zuo

2013-2014 First Place Team

Science Rocks

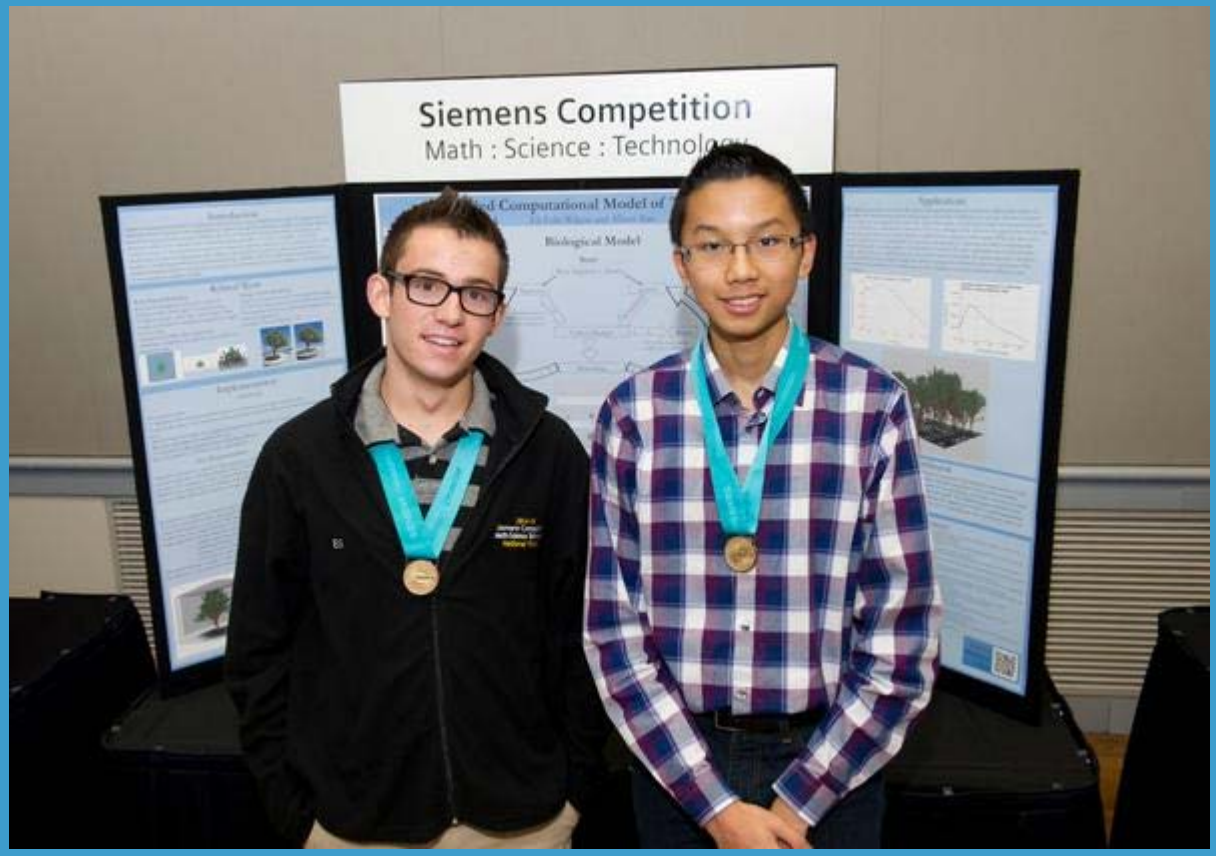
Winners: Team 10, Aspen Elementary School, *Solving the Rubrik's Cube*

Team Members: Andy Corliss, Max Corliss, Phillip Ionkov, Ming Lo

Sponsor: Suzy Koehn

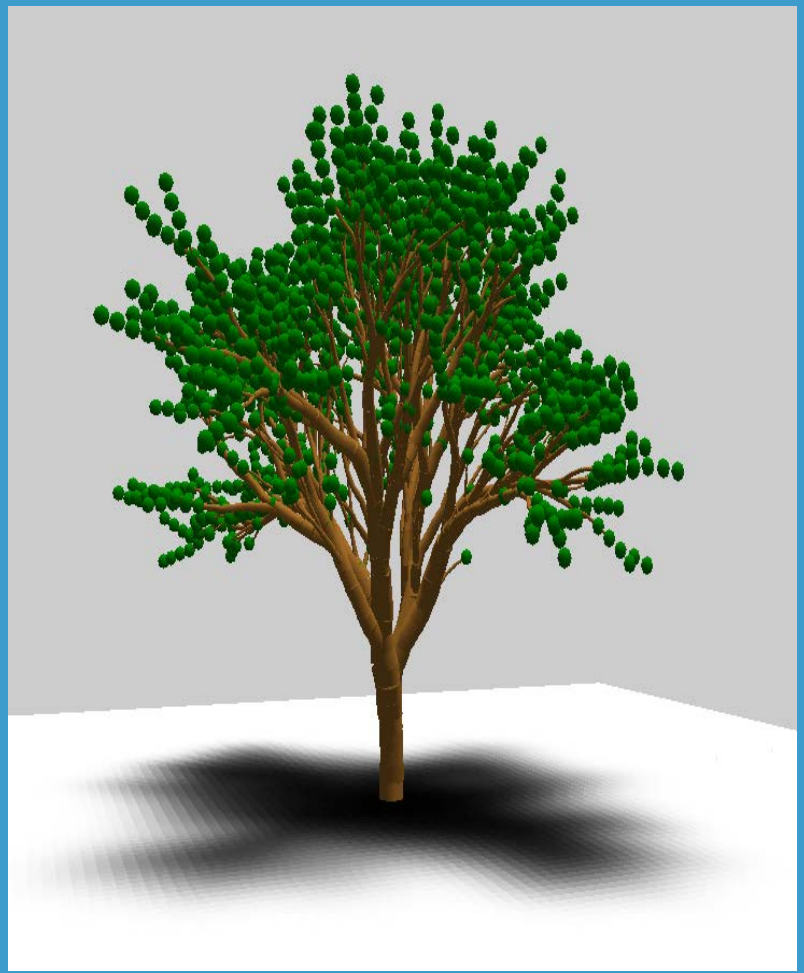
Eli Echt-Wilson and Albert Zuo

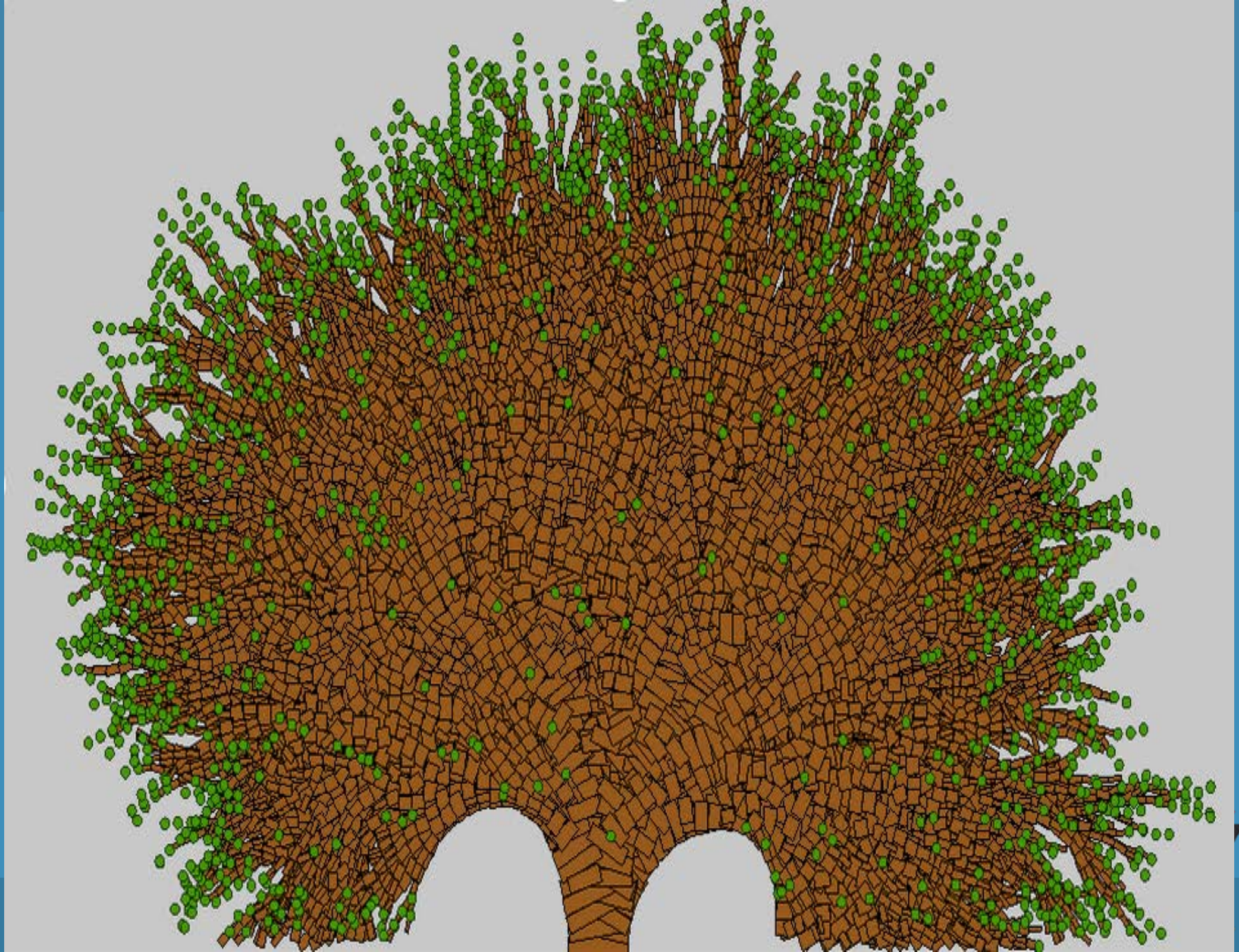
Project Update

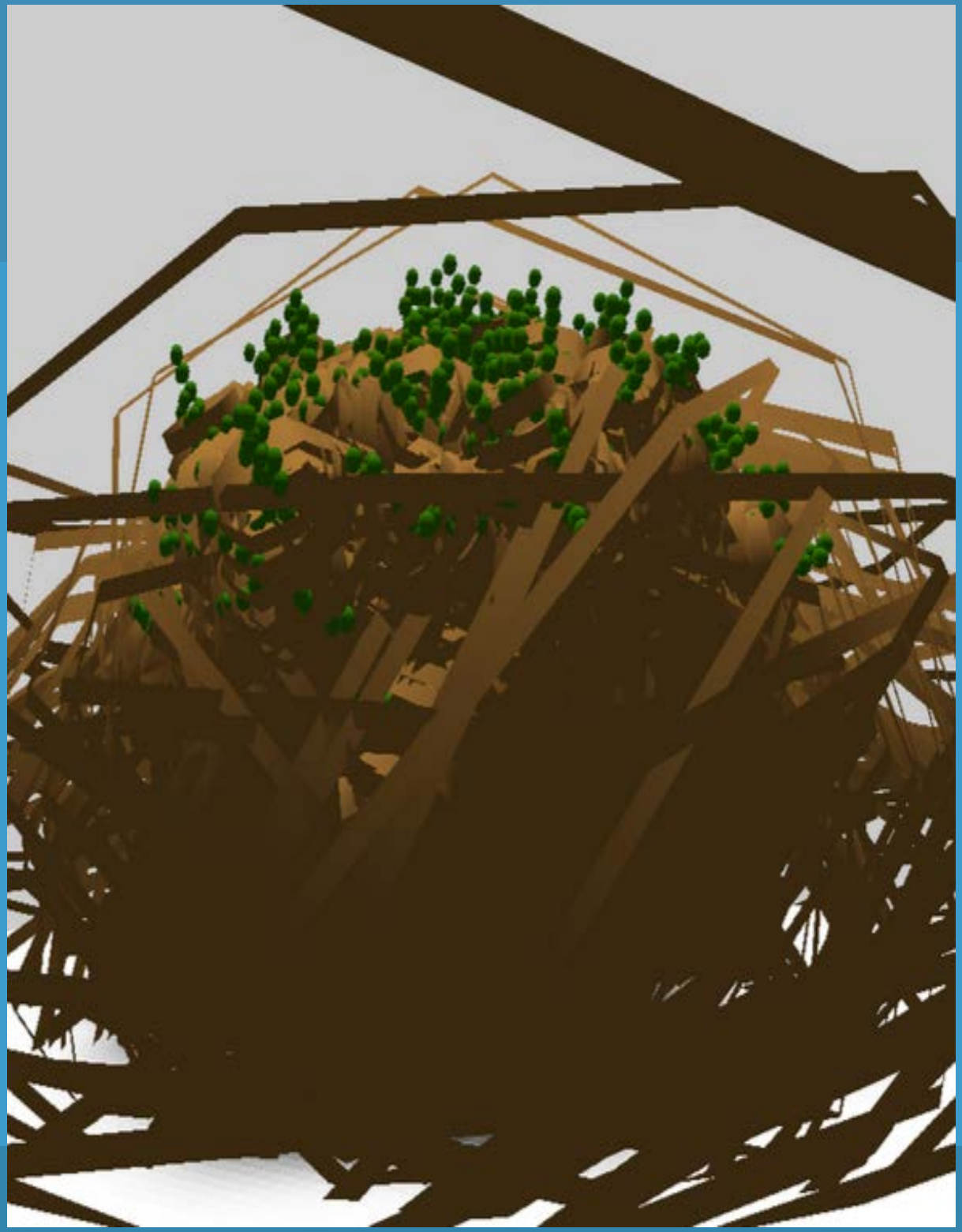


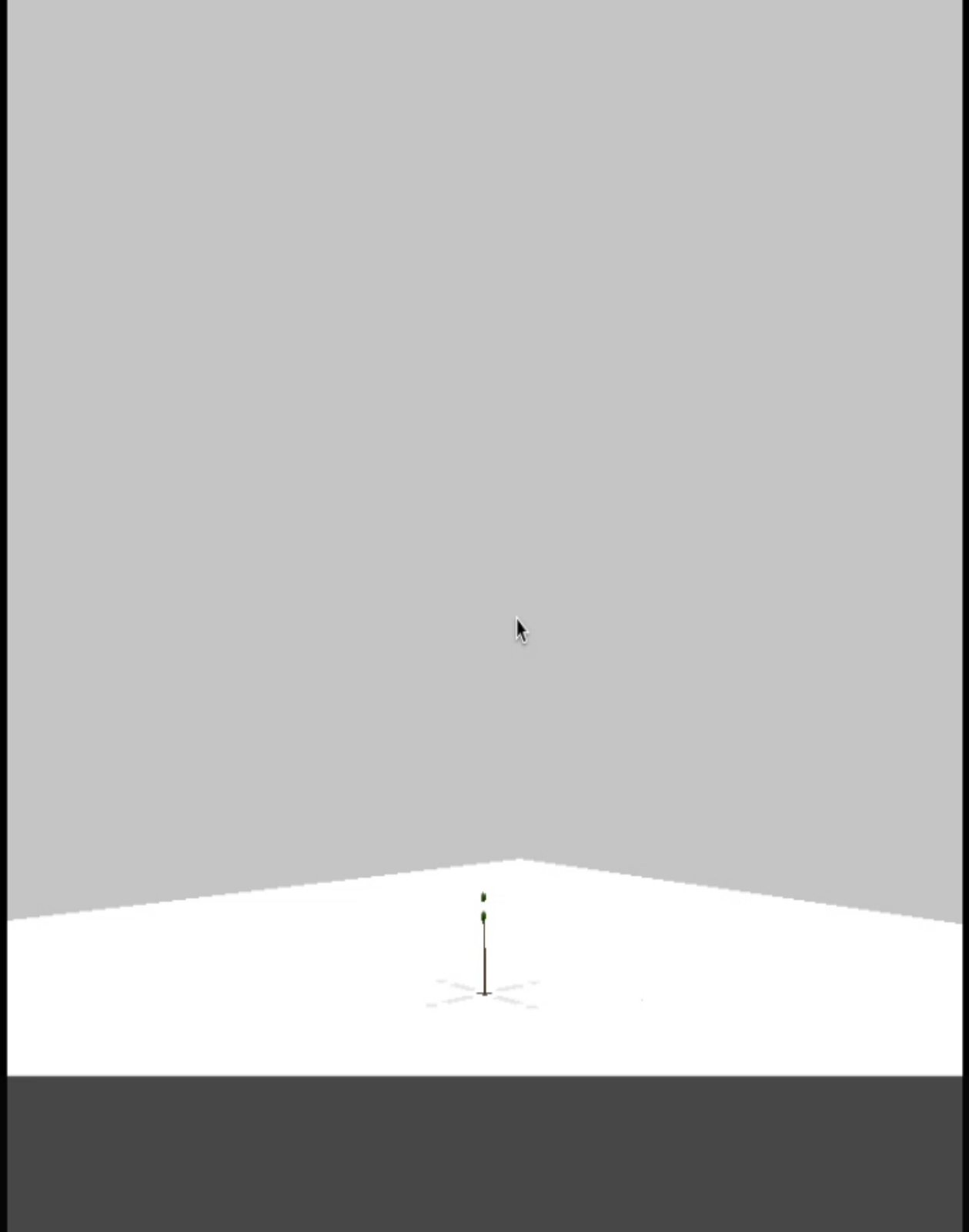
A Detailed Computational Model of Tree Growth

Eli Echt-Wilson and Albert Zuo









Judges' Special Award
Great Starting Position

Winners: Team 123, Santa Fe High, *How Does Starting Position Affect Race Results*

Team Members: Rowan Cahill, Max McGrael, Theo Goujon

Sponsor: Douni Rodgers

Sponsor Recognition

Let's give a big round of applause for our sponsors! The people in these businesses and companies helped us

Reach the Finish Line!

Primary Sponsors:

Los Alamos National Laboratory
Los Alamos National Security, LLC
State of New Mexico

Educational Partners:

The Center for Connected Learning (CCL) and Computer-Based Modeling/NetLogo, Central New Mexico Community College, New Mexico Council for Higher Education Computing/Communication Service (CHECS), Eastern New Mexico University, MIT Starlogo, New Mexico Computing Applications Center, New Mexico EPSCoR Experimental Program to Stimulate Competitive Research, Collaborative Research: Cyberinfrastructure Development in the Western Consortium of Idaho, Nevada, and New Mexico, NSF Award #0918635, New Mexico Highlands University, New Mexico Institute of Mining and Technology, New Mexico Public Education Department, New Mexico State University, NMSU-Dona Ana Community College, Northern New Mexico College San Juan College, Santa Fe Community College, Santa Fe Institute, University of New Mexico, University of New Mexico-Center for Advanced Research Computing

Platinum Sponsors:

Sandia National Laboratories

Gold Sponsors:

Abba Technologies/ Hewlett Packard, DataONE, Google Computer Science for High School, Google RISE, Lockheed Martin, The MathWorks

Silver Sponsors:

Cray Inc, Gulfstream Group and bigbyte.cc , VanDyke Software, Inc.

Bronze Partners:

Albuquerque Journal, Dustin Byford, CAaNES, Computational Analysis and Network Enterprise Systems, Fourth Watch Software, Anthony Giancola, Innovate Educate NM, Los Alamos National Laboratory Foundation, Lobo Internet Services New Mexico Business Weekly, New Mexico Technology Council, PY Multimedia Services, Qforma, Redfish Group, Technology Integration Group

Friends of the Supercomputing Challenge:

Dr. Shaun Cooper, NMSU , Russ Fisher-Ives and Inquiry Facilitators, Inc.
Fractal Foundation , Dr. Lorie Liebrock, NM Tech
New Mexico Network for Women in Science and Engineering
Peggy and Bob Robey, Society for Technical Communication
Young Women in Computing, Las Cruces , Matt Wallaert

Outstanding Service Award

Presented by

Patty Meyer,

Challenge Staff

Outstanding Service Award

Presented to

Celia Einhorn

Scholarship Winners

Presented by

Janeen Anderson, Acaji, Inc.

Scholarship Winners

- Angelica Chacon, *Capital HS*
- Zack Daniels, *SODA*
- Sudeep Dasari, Las Alamos HS
- Noah Gelinas, *SODA*
- Meghan Hill, *Monte del Sol*
- Katelynn James, *Monte del Sol*
- Jose Montoya, *SODA*
- Ahmed Muhyi, *YWiC*
- Colin Redman, *LAHS*
- Clara Sims, *SODA*
- Ray Stubbs, *Deming HS*
- Chris Tapia, *Monte del Sol*
- Rachel Washington, *Sat Sci Acad*

National Center for Women & Information Technology (NCWIT) 2015 Aspiration Winners

From the Challenge

Winners

Paige Torres

SODA, Los Lunas, NM

Sophia Sanchez-Maes

YWiC, Las Cruces, NM

Rachel Washington

Saturday Science and Math Academy, Albuquerque, NM

Runners-Up

Analyssa Martinez

Centennial High, Las Cruces, NM

Grace Cowe

Las Cruces High, Las Cruces, NM

Facebook Award

Presented by

Ted Reed (via Hangouts),
Facebook

Facebook Award

Winners: Team 33, Jackson Mid, *Don't Speak Bullying*

Team Members: Heidi Rolston, Bella Montoya, Miranda Gomez-Nelson

Sponsor: Karen Glennon

Winning a trip to Facebook for a week long camp for middle school girls.

And now, the moment we have all been waiting for….

John Sarrao,
LANL Associate Director
for Theory, Simulation,
And
Computation (ADTSC)

Third Place

Winners: Team 46, Los Alamos High, ***Number Theory Applied to RSA Encryption***

Team Members: Jovan Zhang

Sponsor: Adam Drew

Mentor: Duan Zhang

Second Place

Winners: Team 4, Albuquerque Academy, *Population Fluctuations in Ecosystems*

Team Members: Carl Cherne, Mark Swiler, Jason Watlington

Sponsor: Jim Mims

First Place

Winners: **Team 91,** Monte del Sol**,** *Using a Concentrated Heat System to Shock the P53 Protein to Direct Cancer Cells into Apoptosis*

Team Members: Meghan Hill, Katelynn James

Sponsor: Rhonda Ward

Mentor: Paige Prescott

First Place Winner's Project Overview

Burritos will be served in the kitchen!

Your choice of
Bacon/Green*
Ham/Red
Sausage/Red
Veggie/Green
*no-chile options available

David Kratzer, Consult

You can make a
Positive Difference!