Junior Animal Sciences and Microbiology

Honorable Menti	on		
Joe Harris	JR-ASMB-109	Determining the age of a chicken based on the thickness of the egg shell it laid.	HEIGHTS MIDDLE SCHOOL
Khalifa Ndiaye	JR-ASMB-101	The Surfactant Leach Diner	TAOS ACADEMY
Third Place			
Andres Trujillo	JR-ASMB-10⁴	Pulse for Paws	Los Alamos Public Schools
Second Place			
Isabella Halley	JR-ASMB-102	Magic Bacteria	GRANTS HIGH
First Place			
Oscar Groves	JR-ASMB-108	Health Professionals Recommend Chicken NOT be Washed Before Cooking	Jefferson Middle School

New Mexico Science and Engineering Fair

Junior Biomedical and Behavioral Sciences

Honorable Mentio	n		
Jenna Chavez	JR-BMBS-204	Killer Beauty: Are your everyday beauty products toxic?	LOS ALAMITOS MIDDLE
Rosa Bonita Schwenk	JR-BMBS-201	How Does Distraction Affect Driving	Sacred Heart Catholic School
Third Place			
Marli Prendergast	JR-BMBS-202	Make a Wish ii	LOS ALAMITOS MIDDLE
Second Place			
Lucas Rychener	JR-BMBS-209	How Does Caffeine Affect The Regeneration Of Planarians?	St. Teresa of Avila Catholic School
First Place			
Abigail Baum	JR-BMBS-207	The Best Effortless Method to Control Heart Rate	Albuquerque Institute of Math & Science

New Mexico Science and Engineering Fair

Junior Chemistry

Honorable Ment	ion		
Norah Whitton	JR-CHEM-310	For Leavening!	Los Alamos Public Schools
James Work	JR-CHEM-30	Leavening at its Best	Los Alamos Public Schools
Third Place			
Ellen White	JR-CHEM-31;	Can You Bake at High Altitude? I Can!	Los Alamos Public Schools
Second Place			
Madison Stephens	JR-CHEM-302	But Can You Get Away With Murder?	LOS ALAMITOS MIDDLE
First Place			
Avianna Bernal	JR-CHEM-30!	True Colors	Holy Child Catholic School

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Junior Earth & Environmental Sciences

Honorable Mention	on		
Atanacio Gallegos	JR-EAEV-402	Exploring Chili Extract as an Eco-friendly Insecticide	MILAN ELEMENTARY
Mia Romero	JR-EAEV-412	Runoff & Washout Part II	Albuquerque School of Excellence
Third Place			
Aanya Asoori	JR-EAEV-407	Using Tannic Acid as a Cost-Efficient Flocculant in Different Types of Wastewater	Albuquerque Institute of Math & Science
Second Place			
Evan Peña	JR-EAEV-413	Nature Painting: Production of Low VOC, Low Leach Paint	TAOS ACADEMY
First Place			
Bryant Bell	JR-EAEV-404	The Solar Generator	Albuquerque Institute of Math & Science

New Mexico Science and Engineering Fair

Junior Engineering

Honorable Menti	ion		
Edward Bielejec	JR-ENGR-604	Analysis of Insulative Effectiveness as a Function of	Albuquerque Academy
Evie Odiamar	JR-ENGR-61	Polystyrene Foam Density Hovercrafts: How much weight can they hold?	PINON ELEMENTARY
Lvie Odiamai	or Error or	riovercraits. Flow much weight can triey hold:	FINON ELLINENTARI
Third Place			
Gordon Hilton	JR-ENGR-602	The Aerodynamics of a Model Rocket Nose Cone Designs	HERMOSA MIDDLE SCHOOL
Second Place			
Maggie Lu	JR-ENGR-60	The Effect Blade Shapes Have on the Rotations per Minute	Albuquerque Institute of Math & Science
		of Waterwheels	
First Place			
John Fung	JR-ENGR-61(Building A Better World	Los Alamos Public Schools
Natan Svyatsky	JR-ENGR-61(Building A Better World	Los Alamos Public Schools
, ,			

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Junior Environmental Engineering & Energy

Honorable Menti	on		
Emma Munson	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE
Konik Pearl	JR-ENEV-507	Flying Cars	Albuquerque Institute of Math & Science
Third Place			
Victoria Standlee	JR-ENEV-512	Lightning Motors 2.0	St. Thomas Aquinas School
Second Place			
David Brooke	JR-ENEV-510	Developing a Desalination Solar Still Utilizing Mechanisms to Increase Effective Surface Area	Albuquerque Institute of Math & Science
First Place			
Anderson Stoker	JR-ENEV-50§	Producing Rocket Fuel with Consideration of Resources Found on Mars	Albuquerque Institute of Math & Science

New Mexico Science and Engineering Fair

Junior Math, Computer Science and Technology

Honorable Menti	on		
John Avery III	JR-MCST-70	Forensic (Wi-Fi) files	Los Alamos Public Schools
Jillianne Brondo	JR-MCST-700	Critical Thinking: Rubik's Cube Logic	St Bonaventure School
Third Place			
Isabel Duselis	JR-MCST-71(Driving and Arriving	Holy Child Catholic School
Second Place			
Linus Plohr	JR-MCST-70 ²	DuoNumero: Multilingualism in Math	Los Alamos Public Schools
First Place			
Mateo Madrid Larranaga JR-MCST-708		Coding an In-the-Pocket LED	Jefferson Middle School

New Mexico Science and Engineering Fair

Junior Physics and Astronomy

Honorable Mer Elizabeth Long	JR-PHAST-81	Coupling the Mechanical Oscillations in a Non-Galilean Pendulum	Albuquerque Institute of Math & Science
Third Place			
Jafar Salem	JR-PHAST-81	Magnetism with Temperature	Salam Academy
Second Place			
Kalliope Welch	JR-PHAST-81	Detecting Exoplanets Through Transits	Welch Homeschool
First Place			
Alisha Wald	JR-PHAST-80	Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)

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Junior Plant Sciences

Honorable Mentic	on		
Elijah Girroir	JR-PLNT-904	Farming with Aeroponics, Aquaponics and Hydroponics	Albuquerque Institute of Math & Science
Third Place			
Rhiannon Patel	JR-PLNT-901	Grey water The Untapped Resource	LOS ALAMITOS MIDDLE
Second Place			
Ahana Koushik	JR-PLNT-906	Generational Impact of Microplastics on Tomato Plants	Albuquerque Academy
First Place			
Harry Lee, III	JR-PLNT-909	Oryctolagus cunniculus Urine Fertilizer 2.0	LOS ALAMITOS MIDDLE

New Mexico Science and Engineering Fair

Senior Animal Sciences & Microbiology

Honorable Menti	on		
Kailynn Hernandez	SR-ASMB-10	A Natural Nemesis to Fruit Decomposition	Albuquerque Institute of Math & Science
Third Place			
Javier Camarena	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
Rylie Reza	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
Second Place			
Natyus Curley	SR-ASMB-10	Navajo Tea (Dééh) Antimicrobial Capability	SAN JUAN COLLEGE HIGH SCHOOL
Melaina Yazzie	SR-ASMB-10	Navajo Tea (Dééh) Antimicrobial Capability	SAN JUAN COLLEGE HIGH SCHOOL
First Place			
Lukas Colburn	SR-ASMB-10:	Project Pestalotiopsis	GRANTS HIGH
Ryan Tortalita	SR-ASMB-10	Project Pestalotiopsis	GRANTS HIGH

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Senior Behavioral and Social Sciences

Honorable Mentic	on		
Nicole Mangu	SR-BEHA-204	Making Faces: The Correlation Between Emotional Quotient (EQ) and the Ability to Discern False Verbal Statements from Truthful Ones Through an Analysis of Microexpressions	Albuquerque Institute of Math & Science
Alisha Vallejos	SR-BEHA-200	Screen Time and Well Being	GRANTS HIGH
Third Place			
Ana Choe	SR-BEHA-206	The Impact of Visuals on Phonological Working Memory	Albuquerque Institute of Math & Science
Second Place			
Lola Cordova-Quinn	SR-BEHA-20	Does Delayed Gratification Correlate to Congnitive Function?	Albuquerque Institute of Math & Science
Carter Higgins	SR-BEHA-20	Does Delayed Gratification Correlate to Congnitive Function?	Albuquerque Institute of Math & Science
First Place			
Sawyer Sides	SR-BEHA-20 ⁻	Numbing Factor: Natural vs Synthetic Anti-Inflammatories on the Behavior, Mortality and Metabolism of Lumbricus terrestris	TAOS ACADEMY

New Mexico Science and Engineering Fair

Senior Biology and Plant Sciences

Third Place			
Kyuryeon Kim	SR-BIOP-304	Learning Drug Representation Using Drug-Drug Similarity for Large-Scale Prediction of Drug-Drug Interactions	La Cueva High School
Second Place			
Claire Ross	SR-BIOP-307	Increasing Yield and Food Safety in a Home Grown Hydroponics System with Vermicompost Tea	V. Sue Cleveland High School
First Place			
Dhruv Grandhe	SR-BIOP-303	Modeling Chronic Cadmium Exposure Effects on Epithelial Cell Migration	Albuquerque Academy

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Senior Biomedical and Health Sciences

Honorable Mention	on		
Sophia Rafaelle Romas	sar SR-BMED-40	Project Drosophila	GRANTS HIGH
Cash Wodrich	SR-BMED-40	Growing a Cure: Natural Inflammation Reducers on the Morphology and Mortality of Earthworms	TAOS ACADEMY
Third Place			
Ariana Maestas	SR-BMED-40	To Dye For Again: Dyes, Sugar, Sugar Substitutes and Preservatives on Daphnia	TAOS ACADEMY
Second Place			
Natashia Anderson	SR-BMED-40	Comprehensive Analysis of Hip Compressive Stress and History of Total Hip Replacements	Navajo Preparatory School
First Place			
Arjun Ganesh	SR-BMED-40	Machine Learning Approaches to Determine Clinicopathologic Factors for Prediction of Immune Infiltration in Melanoma	Albuquerque Academy

New Mexico Science and Engineering Fair

Senior Chemistry

Honorable Mer	ntion		
Aspyn Kaskalla	SR-CHEM-50	Chemical Analyses of Archeological Pottery Sherds found along the Colorado River, Grand Canyon, Arizona	NAVAJO PREPARATORY SCHOOL (FARMINGTON)
Third Place			
Rachel Taylor	SR-CHEM-50	Effects of Hemotoxins on Mammalian Blood	Rio Rancho High School
Second Place			
Elias Braun	SR-CHEM-51	Carbon Dioxide Capture and Storage Using Acid-Base Neutralization on CO2 Dissolved in Water	St. Pius X High School
First Place			
Irina Gruzdeva	SR-CHEM-50	Non-Traditional Approaches to Disinfection: The Comeback of Silver Ions	V. Sue Cleveland High School

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Senior Earth & Environmental Sciences

Honorable Menti	on		
Taylor Gomez	SR-EAEV-600	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
Saanvi Kadu	SR-EAEV-603	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
Third Place			
Josh Shaver	SR-EAEV-606	The Effect of Green Roofs on the Interior Temperature of Buildings	Rio Rancho High School
Second Place			
Haylei Redhouse	SR-EAEV-608	Title: Investigating concentrates of Uranium and other Hazardous Metals/Metalloids in the Surrounding Environments of Uranium Contaminated Waters on the Navajo Nation	NAVAJO PREPARATORY SCHOOL (FARMINGTON)
First Place			
Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School

New Mexico Science and Engineering Fair

Senior Engineering

Senior Engli	neering		
Honorable Ment	tion		
Andrew Boggan	SR-ENGR-70	MOCHA: Motorized Operator Controlled Hand Apparatus	V. Sue Cleveland High Schoo
Clark Kardian	SR-ENGR-70	MOCHA: Motorized Operator Controlled Hand Apparatus	V. Sue Cleveland High School
Estevan Miera	SR-ENGR-70	PolyShield: Polymer Enhancement of Materials for Impact Reduction	TAOS ACADEMY
Third Place			
Allyna Thomas	SR-ENGR-70	Does the Choice of Infill Patterns Affect the Result of the Compressive Strength in Weaker or Stronger Materials?	Albuquerque Institute of Math & Science
Second Place			
Adalynn LeBaron	SR-ENGR-70	How Blade Shape in Propeller Design Impacts Thrust	Rio Rancho High School
Annika LeBaron	SR-ENGR-70	How Blade Shape in Propeller Design Impacts Thrust	Rio Rancho High School
First Place			
Asa Hoover	SR-ENGR-70	Triboelectric Nanogenerators: Exploring Material Combinations for Efficient Energy Harvesting	Albuquerque Institute of Math & Science

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Senior Environmental Engineering

Honorable Ment			
Ember Bahe	SR-ENEV-802	DINÉ(Digitally INtegrated Engineering) Arduino Platform for	NAVAJO PREPARATORY SCHOOL
Conhin Passatt	SR-ENEV-809	Environmental Quality, Safety, and Health	(FARMINGTON)
Sophia Bassett	SR-ENEV-80	Allergy Tea	GRANTS HIGH
John Edwards	SR-ENEV-80	Hydrogen-Oxygen Engine	V. Sue Cleveland High School
Naveen Gonzales		Making Biodegradable "Water Bottles"	Albuquerque Institute of Math & Science
Benjamin Varos	SR-ENEV-80'	Nature Breathe 4: De-Allergenated Plant Materials as Sustainable Media for HVAC Filtration of Aerosol	TAOS ACADEMY
Joshua Wilson	SR-ENEV-807	Nanoparticles, VOC's & CO2 Hydrogen-Oxygen Engine	V. Sue Cleveland High School
Third Place			
Maggie Lonsinger	SR-ENEV-80(Phytoremediation Potential of Yucca elata, Carya illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and Affordable Approach	ALTA VISTA EARLY COLLEGE HIGH SCHOOL
Carlos Martinez	SR-ENEV-800	Phytoremediation Potential of Yucca elata, Carya illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and Affordable Approach	ALTA VISTA EARLY COLLEGE HIGH SCHOOL
Danna Renteria	SR-ENEV-80	Phytoremediation Potential of Yucca elata, Carya illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and Affordable Approach	ALTA VISTA EARLY COLLEGE HIGH SCHOOL
Second Place			
Orion Gonzales	SR-ENEV-804	The Economic Viability of Dual-Axis Solar Tracking without Computational Technology	Albuquerque Institute of Math & Science
First Place			
Enzi Karuho	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement	New Mexico Military Institute
Steven Xu	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement	New Mexico Military Institute
Sylvia Xu	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement	New Mexico Military Institute

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Senior Math, Computer Science and Technology

Honorable Mentic	on		
Idania Gutierrez	SR-MCST-90	Personal Health Bubble Sensor: Production/Enhancement of Air Quality Sensors for CO2, VOC and Particulate Detection	TAOS ACADEMY
Trey Hardy	SR-MCST-90	Oils for Optimal Opacity	GRANTS HIGH
Allison Hobbs	SR-MCST-90	Oils for Optimal Opacity	GRANTS HIGH
Anirudh Nanda	SR-MCST-90	A Comparative Analysis of the CGNR and CAV Iterative Algorithms in Solving Linear Systems of Equations	Albuquerque Institute of Math & Science
Third Place			
Helena Welch	SR-MCST-90	Virtually Reconstructing an Ancient Musical Instrument	Welch Homeschool
Second Place			
Henry Tischler	SR-MCST-90	Using Clustered Random Samples to find Spurious Correlations in Neural Networks	The Academy for Technology and the Classics
First Place			
Sowmya Sankaran	SR-MCST-90	Generalization of Object Detection for Multiple Species in Drone Images Using a Fine-Tuned Machine Learning Model	Albuquerque Academy

New Mexico Science and Engineering Fair

Senior Physics, Astronomy, and Materials Sciences

Honorable Men Amber Bizardie	SR-PAMS-10	Technological Advances to Make Spacecraft Out of A Hydrophilic or Hydrophobic Material, to Protect Passengers	SAN JUAN COLLEGE HIGH SCHOOL
Alfred Jones	SR-PAMS-100	When Landing. Designing an Optimized Acoustic Lens for Sonic Focus and Enhancement	Albuquerque Institute of Math & Science
Third Place			
Joel Saltzman	SR-PAMS-100	ThermoWave: Thermo-acoustic Wave Generation Through Different Color Media and Stack Placement	TAOS ACADEMY
Second Place			
Tate Plohr	SR-PAMS-100	Magnetic Reconnection	Los Alamos Public Schools
First Place			
Brandi Bassett	SR-PAMS-100	Glowing, Glowing, Gone!	GRANTS HIGH

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Junior Animal Sciences and Microbiology

Honorable Mention

Joe Harris JR-ASMB-10! Determining the age of a chicken based on the thickness of

HEIGHTS MIDDLE SCHOOL

the egg shell it laid.

Khalifa Ndiaye JR-ASMB-101 The Surfactant Leach Diner

TAOS ACADEMY

C02 & Greenhouse Gas Reduction

Third Place

Andres Trujillo JR-ASMB-10² Pulse for Paws

Los Alamos Public Schools

Second Place

Isabella Halley JR-ASMB-102 Magic Bacteria

GRANTS HIGH

NMJAS Paper Competition

First Place

Oscar Groves JR-ASMB-108 H

Health Professionals Recommend Chicken NOT be Washed Before Cooking

Jefferson Middle School

New Mexico Science and Engineering Fair

Junior Biomedical and Behavioral Sciences

Honorable Mention

Jenna Chavez JR-BMBS-20⁴ Killer Beauty: Are your everyday beauty products toxic?

LOS ALAMITOS MIDDLE

C02 & Greenhouse Gas Reduction

Jenna Chavez JR-BMBS-204 Killer Beauty: Are your everyday beauty products toxic?

LOS ALAMITOS MIDDLE

Thermo Fisher

JR-BMBS-20₄

Killer Beauty: Are your everyday beauty products toxic?

LOS ALAMITOS MIDDLE

AAUW

Jenna Chavez

Rosa Bonita Schwenk

JR-BMBS-201 How Does Distraction Affect Driving

Sacred Heart Catholic School

American Psychological Association & Teachers of Psychology in Secondary

Third Place

Marli Prendergast JR-BMBS-202 Make a Wish ii

LOS ALAMITOS MIDDLE

Second Place

Lucas Rychener JR-BMBS-20! How Does Caffeine Affect The Regeneration Of Planarians?

St. Teresa of Avila Catholic School

C02 & Greenhouse Gas Reduction

Lucas Rychener JR-BMBS-20! How Does Caffeine Affect The Regeneration Of Planarians?

St. Teresa of Avila Catholic School

NMJAS Paper Competition

First Place

Abigail Baum

JR-BMBS-207

The Best Effortless Method to Control Heart Rate

Albuquerque Institute of Math & Science

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Junior Biomedical and Behavioral Sciences

New Mexicans for Science and Reason (NMSR) Use of Scientific Method

Abigail Baum JR-BMBS-207 The Best Effortless Method to Control Heart Rate

New Mexico Network for Women in Science & Engineering

Albuquerque Institute of Math & Science

New Mexico Science and Engineering Fair

Junior Chemistry

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JR-CHEM-310 For Leavening! Los Alamos Public Schools

James Work JR-CHEM-30 Leavening at its Best Los Alamos Public Schools

Third Place

Norah Whitton

Ellen White JR-CHEM-31: Can You Bake at High Altitude? I Can! Los Alamos Public Schools

American Chemical Society

Second Place

Madison Stephens JR-CHEM-30: But... Can You Get Away With Murder? LOS ALAMITOS MIDDLE

Thermo Fisher

Madison Stephens JR-CHEM-30: But... Can You Get Away With Murder? LOS ALAMITOS MIDDLE

New Mexico Network for Women in Science & Engineering

Madison Stephens JR-CHEM-30: But... Can You Get Away With Murder? LOS ALAMITOS MIDDLE

AAUW

First Place

Avianna Bernal JR-CHEM-30! True Colors Holy Child Catholic School

C02 & Greenhouse Gas Reduction

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Junior Earth & Environmental Sciences

Hon	orable	Men	tıon

Atanacio Gallegos JR-EAEV-402 Exploring Chili Extract as an Eco-friendly Insecticide MILAN ELEMENTARY

C02 & Greenhouse Gas Reduction

Mia Romero JR-EAEV-412 Runoff & Washout Part II Albuquerque School of Excellence

New Mexico Network for Women in Science & Engineering

Third Place

Aanya Asoori JR-EAEV-407 Using Tannic Acid as a Cost-Efficient Flocculant in Different Albuquerque Institute of Math & Science

Types of Wastewater

Vanetta Perry

Aanya Asoori JR-EAEV-407 Using Tannic Acid as a Cost-Efficient Flocculant in Different Albuquerque Institute of Math & Science

Types of Wastewater

New Mexico Network for Women in Science & Engineering

Second Place

Evan Peña JR-EAEV-413 Nature Painting: Production of Low VOC, Low Leach Paint TAOS ACADEMY

Thermo Fisher

Evan Peña JR-EAEV-413 Nature Painting: Production of Low VOC, Low Leach Paint TAOS ACADEMY

New Mexico Bureau of Geology and Mineral Resources & the New Mexico Geological Society

First Place

Bryant Bell JR-EAEV-404 The Solar Generator Albuquerque Institute of Math & Science

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Junior Engineering

Honorable Ment	ion		
Edward Bielejec	JR-ENGR-604	Analysis of Insulative Effectiveness as a Function of Polystyrene Foam Density	Albuquerque Academy
C02 & Greenhou	se Gas Reduction	, ,	
Evie Odiamar	JR-ENGR-61(Hovercrafts: How much weight can they hold?	PINON ELEMENTARY
Third Place			
Gordon Hilton	JR-ENGR-602	The Aerodynamics of a Model Rocket Nose Cone Designs	HERMOSA MIDDLE SCHOOL
Office of Navai N	lesearch (ONR)		
Second Place Maggie Lu	JR-ENGR-60	The Effect Blade Shapes Have on the Rotations per Minute	Albuquerque Institute of Math & Science
Second Place		The Effect Blade Shapes Have on the Rotations per Minute of Waterwheels	Albuquerque Institute of Math & Science
Second Place Maggie Lu		·	Albuquerque Institute of Math & Science
Second Place Maggie Lu AAUW		·	Albuquerque Institute of Math & Science Los Alamos Public Schools
Second Place Maggie Lu AAUW First Place	JR-ENGR-60!	of Waterwheels	, ,
Second Place Maggie Lu AAUW First Place John Fung	JR-ENGR-60!	of Waterwheels	, ,

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Junior Environmental Engineering & Energy

Honorable Ment	tion					
Emma Munson	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE			
New Mexicans for	or Science and Re	ason (NMSR) Use of Scientific Method				
mma Munson	JR-ENEV-501	O1 Hot Garbage!				
ASM Internation	al - Los Alamos Cl	hapter				
mma Munson	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE			
C02 & Greenhou	ise Gas Reduction					
mma Munson Thermo Fisher	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE			
Emma Munson	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE			
New Mexico Net	work for Women i	in Science & Engineering				
Emma Munson AAUW	JR-ENEV-501	Hot Garbage!	LOS ALAMITOS MIDDLE			
Konik Pearl	JR-ENEV-507	Flying Cars	Albuquerque Institute of Math & Science			
Third Place						
/ictoria Standlee	JR-ENEV-512	Lightning Motors 2.0	St. Thomas Aquinas School			
Second Place						
David Brooke	JR-ENEV-510	Developing a Desalination Solar Still Utilizing Mechanisms to Increase Effective Surface Area	Albuquerque Institute of Math & Science			
Thermo Fisher						
David Brooke	JR-ENEV-510	Developing a Desalination Solar Still Utilizing Mechanisms to Increase Effective Surface Area	Albuquerque Institute of Math & Science			
NMJAS Paper Co	ompetition					
First Place						
Anderson Stoker	JR-ENEV-509	Producing Rocket Fuel with Consideration of Resources Found on Mars	Albuquerque Institute of Math & Science			

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C02 & Greenhouse Gas Reduction

Junior Math, Computer Science and Technology

Honorable Men	ntion		
John Avery III	JR-MCST-708	Forensic (Wi-Fi) files	Los Alamos Public Schools
Jillianne Brondo	JR-MCST-700	Critical Thinking: Rubik's Cube Logic	St Bonaventure School
Third Place			
Isabel Duselis	JR-MCST-710	Driving and Arriving	Holy Child Catholic School
C02 & Greenho	use Gas Reduction		
Second Place			
Linus Plohr Thermo Fisher	JR-MCST-70 ²	DuoNumero: Multilingualism in Math	Los Alamos Public Schools
Linus Plohr	JR-MCST-704	DuoNumero: Multilingualism in Math	Los Alamos Public Schools
NMJAS Paper C	Competition		
First Place			
Mateo Madrid Larra	naga JR-MCST-708	Coding an In-the-Pocket LED	Jefferson Middle School

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Junior Physics and Astronomy

Honorable Menti	on		
Elizabeth Long	JR-PHAST-81	Coupling the Mechanical Oscillations in a Non-Galilean Pendulum	Albuquerque Institute of Math & Science
Thermo Fisher			
Elizabeth Long	JR-PHAST-81	Coupling the Mechanical Oscillations in a Non-Galilean Pendulum	Albuquerque Institute of Math & Science
AAUW			
Third Place			
Jafar Salem	JR-PHAST-81	Magnetism with Temperature	Salam Academy
Second Place			
Kalliope Welch	JR-PHAST-81	Detecting Exoplanets Through Transits	Welch Homeschool
First Place			
Alisha Wald	JR-PHAST-8(Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)
C02 & Greenhous	e Gas Reduction		
Alisha Wald	JR-PHAST-8(Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)
Office of Naval Re	esearch (ONR)		
Alisha Wald	JR-PHAST-8(Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)
Thermo Fisher			
Alisha Wald	JR-PHAST-8(Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)
New Mexico Netw	ork for Women i	n Science & Engineering	
Alisha Wald	JR-PHAST-8(Beyond Detection: Exploring the Science Behind Stealth Innovations	MANDELA INTERNATIONAL MAGNET (MIMS)
AAUW			

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Junior Plant Sciences

Honorable Men	tion		
Elijah Girroir	JR-PLNT-904	Farming with Aeroponics, Aquaponics and Hydroponics	Albuquerque Institute of Math & Science
Third Place			
Rhiannon Patel NOAA	JR-PLNT-901	Grey water The Untapped Resource	LOS ALAMITOS MIDDLE
Second Place			
Ahana Koushik Thermo Fisher	JR-PLNT-906	Generational Impact of Microplastics on Tomato Plants	Albuquerque Academy
Ahana Koushik AAUW	JR-PLNT-906	Generational Impact of Microplastics on Tomato Plants	Albuquerque Academy
First Place			
Harry Lee, III	JR-PLNT-909	Oryctolagus cunniculus Urine Fertilizer 2.0	LOS ALAMITOS MIDDLE
C02 & Greenhou	use Gas Reduction		

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Senior Animal Sciences & Microbiology

Kailynn Hernandez	SR-ASMB-10	A Natural Nemesis to Fruit Decomposition	Albuquerque Institute of Math & Science
Third Place			
Javier Camarena	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
C02 & Greenhous	se Gas Reduction		
Javier Camarena	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
NOAA			
Rylie Reza	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
C02 & Greenhous	se Gas Reduction		
Rylie Reza	SR-ASMB-10	Decreasing Salinity in Costal Waters Effects on Brine Shrimp and Surrounding Food Chain	Rio Rancho High School
NOAA			
Second Place			
Natyus Curley	SR-ASMB-10	Navajo Tea (Dééh) Antimicrobial Capability	SAN JUAN COLLEGE HIGH SCHOOL
Melaina Yazzie	SR-ASMB-10	Navajo Tea (Dééh) Antimicrobial Capability	SAN JUAN COLLEGE HIGH SCHOOL
First Place			
Lukas Colburn	SR-ASMB-10	Project Pestalotiopsis	GRANTS HIGH
C02 & Greenhous	se Gas Reduction		
Ryan Tortalita	SR-ASMB-10	Project Pestalotiopsis	GRANTS HIGH
C02 & Greenhous	se Gas Reduction		

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Senior Behavioral and Social Sciences

Honorable Ment	ion		
Nicole Mangu	SR-BEHA-204	Making Faces: The Correlation Between Emotional Quotient (EQ) and the Ability to Discern False Verbal Statements from Truthful Ones Through an Analysis of Microexpressions	Albuquerque Institute of Math & Science
New Mexico Netv	work for Women	in Science & Engineering	
Alisha Vallejos	SR-BEHA-200	Screen Time and Well Being	GRANTS HIGH
C02 & Greenhous	se Gas Reduction		
Third Place			
Ana Choe	SR-BEHA-206	The Impact of Visuals on Phonological Working Memory	Albuquerque Institute of Math & Science
Second Place			
Lola Cordova-Quinn	SR-BEHA-20	Does Delayed Gratification Correlate to Congnitive Function?	Albuquerque Institute of Math & Science
Carter Higgins	SR-BEHA-20!	Does Delayed Gratification Correlate to Congnitive Function?	Albuquerque Institute of Math & Science
First Place			
Sawyer Sides	SR-BEHA-20 ⁻	Numbing Factor: Natural vs Synthetic Anti-Inflammatories on the Behavior, Mortality and Metabolism of Lumbricus terrestris	TAOS ACADEMY
C02 & Greenhous	se Gas Reduction		
Sawyer Sides	SR-BEHA-20°	Numbing Factor: Natural vs Synthetic Anti-Inflammatories on the Behavior, Mortality and Metabolism of Lumbricus terrestris	TAOS ACADEMY
New Mexico Netv	work for Women i	in Science & Engineering	

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Senior Biology and Plant Sciences

Kyuryeon Kim	SR-BIOP-304	Learning Drug Representation Using Drug-Drug Similarity for Large-Scale Prediction of Drug-Drug Interactions	La Cueva High School
American Cher	nical Society		
Kyuryeon Kim	SR-BIOP-304	Learning Drug Representation Using Drug-Drug Similarity for Large-Scale Prediction of Drug-Drug Interactions	La Cueva High School
NMJAS Paper (Competition		
Second Place			
Claire Ross	SR-BIOP-307	Increasing Yield and Food Safety in a Home Grown Hydroponics System with Vermicompost Tea	V. Sue Cleveland High School
C02 & Greenho	ouse Gas Reduction		
Claire Ross	SR-BIOP-307	Increasing Yield and Food Safety in a Home Grown Hydroponics System with Vermicompost Tea	V. Sue Cleveland High School
Office of Naval	Research (ONR)		
First Place			
Dhruv Grandhe	SR-BIOP-303	Modeling Chronic Cadmium Exposure Effects on Epithelial Cell Migration	Albuquerque Academy

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Senior Biomedical and Health Sciences

Clay T. Smith

Sophia Rafaelle Roma	asar SR-BMED-40	Project Drosophila	GRANTS HIGH
Cash Wodrich	SR-BMED-40	Growing a Cure: Natural Inflammation Reducers on the Morphology and Mortality of Earthworms	TAOS ACADEMY
C02 & Greenhou	se Gas Reduction		
Third Place			
Ariana Maestas	SR-BMED-40	To Dye For Again: Dyes, Sugar, Sugar Substitutes and Preservatives on Daphnia	TAOS ACADEMY
Second Place			
Natashia Anderson	SR-BMED-40	Comprehensive Analysis of Hip Compressive Stress and History of Total Hip Replacements	Navajo Preparatory School
Rex Robinson Av	vard		
First Place			
Arjun Ganesh	SR-BMED-40	Machine Learning Approaches to Determine Clinicopathologic Factors for Prediction of Immune Infiltration in Melanoma	Albuquerque Academy
C02 & Greenhou	se Gas Reduction		
Arjun Ganesh	SR-BMED-40	Machine Learning Approaches to Determine Clinicopathologic Factors for Prediction of Immune Infiltration in Melanoma	Albuquerque Academy
Regeneron Biom	edical Science Aw	ard	
Arjun Ganesh	SR-BMED-40	Machine Learning Approaches to Determine Clinicopathologic Factors for Prediction of Immune Infiltration in Melanoma	Albuquerque Academy

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Senior Chemistry

Honorable Mer	ntion		
Aspyn Kaskalla	SR-CHEM-50	Chemical Analyses of Archeological Pottery Sherds found along the Colorado River, Grand Canyon, Arizona	NAVAJO PREPARATORY SCHOOL (FARMINGTON)
American Chem	nical Society		
Third Place			
Rachel Taylor	SR-CHEM-50	Effects of Hemotoxins on Mammalian Blood	Rio Rancho High School
Second Place			
Elias Braun	SR-CHEM-51	Carbon Dioxide Capture and Storage Using Acid-Base Neutralization on CO2 Dissolved in Water	St. Pius X High School
C02 & Greenho	use Gas Reduction		
Elias Braun	SR-CHEM-51	Carbon Dioxide Capture and Storage Using Acid-Base Neutralization on CO2 Dissolved in Water	St. Pius X High School
C02 & Greenho	use Gas Reduction	Scholarship	
First Place			
Irina Gruzdeva	SR-CHEM-50	Non-Traditional Approaches to Disinfection: The Comeback of Silver Ions	V. Sue Cleveland High School
United States A	ir Force		
Irina Gruzdeva	SR-CHEM-50	Non-Traditional Approaches to Disinfection: The Comeback of Silver Ions	V. Sue Cleveland High School
AAUW			

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Senior Earth & Environmental Sciences

Honorable Men	ition		
Taylor Gomez	SR-EAEV-600	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
Yale Science an	d Engineering Asso	ociation	
Taylor Gomez	SR-EAEV-603	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
New Mexico Ne	twork for Women i	in Science & Engineering	
Saanvi Kadu	SR-EAEV-600	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
Yale Science an	d Engineering Asso	ociation	
Saanvi Kadu	SR-EAEV-600	Construction of an Environmentally Efficient and Solar-Powered System to Distill Salinated Water for Hydroponic Cultivation	Albuquerque Institute of Math & Science
New Mexico Net	twork for Women i	in Science & Engineering	
Third Place			
Josh Shaver	SR-EAEV-606	The Effect of Green Roofs on the Interior Temperature of Buildings	Rio Rancho High School
Second Place			
Haylei Redhouse	SR-EAEV-608	Title: Investigating concentrates of Uranium and other Hazardous Metals/Metalloids in the Surrounding Environments of Uranium Contaminated Waters on the Navajo Nation	NAVAJO PREPARATORY SCHOOL (FARMINGTON)
First Diago			
First Place Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School
NASA EARTH S	ystem Science Awa		
Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School
Teresa Johnson			
Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School
New Mexico Bui	reau of Geology ar	nd Mineral Resources & the New Mexico Geological Society	
Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School
NMJAS Paper Co	ompetition		
Gene Huntley	SR-EAEV-607	A Realtime Camera Fusion 3D Model with a Novel Feature-Matching and Star Identification-Based Calibration for Tracking Smoke Plumes	V. Sue Cleveland High School

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Senior Earth & Environmental Sciences

Richard N. Overdorf Grand Award

New Mexico Science and Engineering Fair

Senior Engineering

Honorable Men	tion		
Andrew Boggan	SR-ENGR-70	MOCHA: Motorized Operator Controlled Hand Apparatus	V. Sue Cleveland High School
Clark Kardian	SR-ENGR-70	MOCHA: Motorized Operator Controlled Hand Apparatus	V. Sue Cleveland High School
Estevan Miera	SR-ENGR-70	PolyShield: Polymer Enhancement of Materials for Impact Reduction	TAOS ACADEMY
Third Place			
Allyna Thomas	SR-ENGR-70	Does the Choice of Infill Patterns Affect the Result of the Compressive Strength in Weaker or Stronger Materials?	Albuquerque Institute of Math & Science
Second Place			
Adalynn LeBaron	SR-ENGR-70	How Blade Shape in Propeller Design Impacts Thrust	Rio Rancho High School
New Mexico Net	work for Women i	in Science & Engineering	
Annika LeBaron	SR-ENGR-70	How Blade Shape in Propeller Design Impacts Thrust	Rio Rancho High School
New Mexico Net	work for Women	in Science & Engineering	
First Place			
Asa Hoover	SR-ENGR-70	Triboelectric Nanogenerators: Exploring Material Combinations for Efficient Energy Harvesting	Albuquerque Institute of Math & Science
C02 & Greenhou	ıse Gas Reduction		

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Senior Environmental Engineering

Honorable Meni Ember Bahe	SR-ENEV-802	DINÉ(Digitally INtegrated Engineering) Arduino Platform for	NAVAJO PREPARATORY SCHOO
ciliber balle	OIVEIVE VOOI	Environmental Quality, Safety, and Health	NAVAJO PREPARATORT SCHOO (FARMINGTON
New Mexico Net	work for Women i	in Science & Engineering	
Sophia Bassett	SR-ENEV-809	Allergy Tea	GRANTS HIGH
John Edwards	SR-ENEV-80	Hydrogen-Oxygen Engine	V. Sue Cleveland High School
U.S. Agency for	International Dev	elopment (USAID)	
John Edwards	SR-ENEV-807	Hydrogen-Oxygen Engine	V. Sue Cleveland High Schoo
John Harty			
Naveen Gonzales	SR-ENEV-80!	Making Biodegradable "Water Bottles"	Albuquerque Institute of Math & Science
Benjamin Varos	SR-ENEV-80 ⁻	Nature Breathe 4: De-Allergenated Plant Materials as Sustainable Media for HVAC Filtration of Aerosol Nanoparticles, VOC's & CO2	TAOS ACADEMY
C02 & Greenhou	use Gas Reduction		
Joshua Wilson	SR-ENEV-807	Hydrogen-Oxygen Engine	V. Sue Cleveland High Schoo
U.S. Agency for	International Dev	elopment (USAID)	
Joshua Wilson	SR-ENEV-807	Hydrogen-Oxygen Engine	V. Sue Cleveland High Schoo
John Harty			
Third Place			
Maggie Lonsinger	SR-ENEV-800	Phytoremediation Potential of Yucca elata, Carya	ALTA VISTA EARLY COLLEGE HIGH
		illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and Affordable Approach	SCHOOL
C02 & Greenhou	use Gas Reduction		
Carlos Martinez	SR-ENEV-800	Phytoremediation Potential of Yucca elata, Carya	ALTA VISTA EARLY COLLEGE HIGH
		illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and	SCHOOL
C02 0 Consultan	on Con Dadadia	Affordable Approach	
CO2 & Greennou	use Gas Reduction		
Danna Renteria	SR-ENEV-800	Phytoremediation Potential of Yucca elata, Carya	ALTA VISTA EARLY COLLEGE HIGH
		illinoinensis, and Opuntia ficus-indica for Arsenic and Pollutant Removal in Drinking Water: A Sustainable and	SCHOOL
CO2 & Greenhou	ıse Gas Reduction	Affordable Approach	
00_ 00 00 00 00 00			
Second Place			
Orion Gonzales	SR-ENEV-804	The Economic Viability of Dual-Axis Solar Tracking without	Albuquerque Institute of Math & Science
Ricoh Sustainab	le Development A	Computational Technology ward	
First Place			
Enzi Karuho	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well	New Mexico Military Institute

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Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement

Senior Environmental Engineering

Steven Xu	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement	New Mexico Military Institute
Sylvia Xu	SR-ENEV-806	Unraveling Metal-Water-Daphnia Nexus in Tap Water, Well Water, and Mine Creek Water: Health Effects and Natural Bio-Adsorbents for Water Quality Enhancement	New Mexico Military Institute

New Mexico Science and Engineering Fair

Senior Math, Computer Science and Technology

dania Gutierrez	SR-MCST-90	Personal Health Bubble Sensor: Production/Enhancement of	TAOS ACADEM
		Air Quality Sensors for CO2, VOC and Particulate Detection	
C02 & Greenhouse	e Gas Reduction		
Trey Hardy	SR-MCST-90	Oils for Optimal Opacity	GRANTS HIGH
Allison Hobbs	SR-MCST-90	Oils for Optimal Opacity	GRANTS HIGH
Anirudh Nanda	SR-MCST-90	A Comparative Analysis of the CGNR and CAV Iterative Algorithms in Solving Linear Systems of Equations	Albuquerque Institute of Math & Science
Third Place			
Helena Welch	SR-MCST-90	Virtually Reconstructing an Ancient Musical Instrument	Welch Homeschoo
New Mexico Netwo	ork for Women i	n Science & Engineering	
Second Place			
Henry Tischler	SR-MCST-90	Using Clustered Random Samples to find Spurious	The Academy for Technology and the
·		Correlations in Neural Networks	Classic
First Place		Correlations in Neural Networks	Classic
First Place Sowmya Sankaran	SR-MCST-90	Correlations in Neural Networks Generalization of Object Detection for Multiple Species in Drone Images Using a Fine-Tuned Machine Learning Model	Albuquerque Academ

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Senior Physics, Astronomy, and Materials Sciences

Honorable Mention			
Amber Bizardie	SR-PAMS-10 ⁻	Technological Advances to Make Spacecraft Out of A Hydrophilic or Hydrophobic Material, to Protect Passengers When Landing.	SAN JUAN COLLEGE HIGH SCHOOL
United States Metric Association			
Alfred Jones	SR-PAMS-100	Designing an Optimized Acoustic Lens for Sonic Focus and Enhancement	Albuquerque Institute of Math & Science
United States Air Force			
Third Place			
Joel Saltzman	SR-PAMS-10(ThermoWave: Thermo-acoustic Wave Generation Through Different Color Media and Stack Placement	TAOS ACADEMY
Second Place			
Tate Plohr	SR-PAMS-100	Magnetic Reconnection	Los Alamos Public Schools
First Place			
Brandi Bassett	SR-PAMS-100	Glowing, Glowing, Gone!	GRANTS HIGH
C02 & Greenhouse Gas Reduction			
Brandi Bassett	SR-PAMS-100	Glowing, Glowing, Gone!	GRANTS HIGH
Office of Naval Research (ONR)			
Brandi Bassett David Shortess	SR-PAMS-10(Glowing, Glowing, Gone!	GRANTS HIGH
Brandi Bassett AAUW	SR-PAMS-100	Glowing, Glowing, Gone!	GRANTS HIGH

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