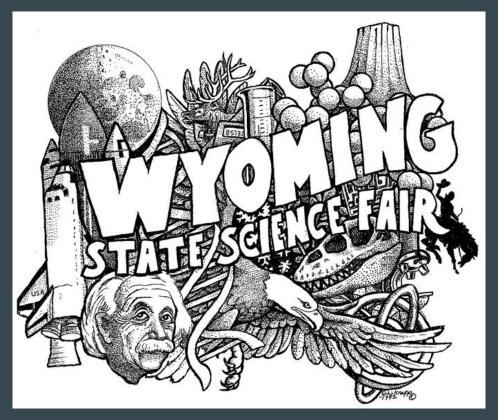
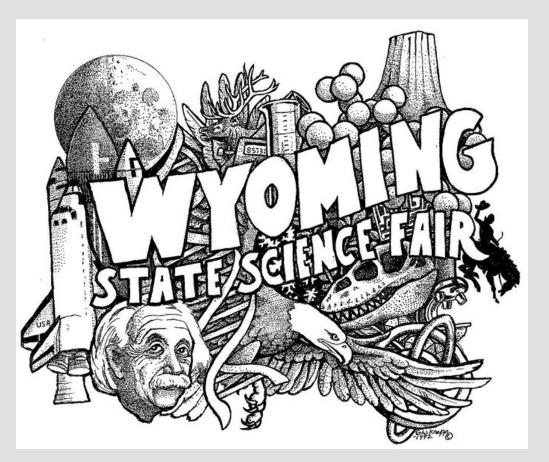


### 2017 Wyoming State Science Fair Awards





# Animal & Plant Sciences

#### **Animal & Plant Sciences - Junior Division**



3rd Place

Keeping the Sage in Sage Grouse

Theresa Bautz

Lander Middle School

Lander, WY

#### **Animal & Plant Sciences - Junior Division**



2nd Place

The Dirt On Mulch

Tanner Roberts

Pinedale Middle School

Pinedale, WY

#### **Animal & Plant Sciences - Junior Division**



1st Place

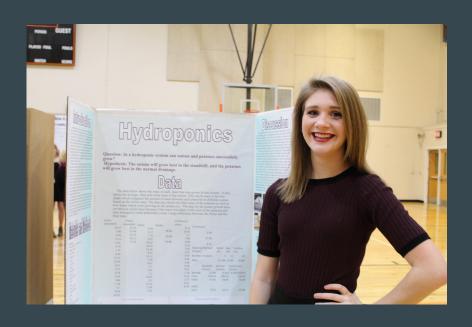
Artificial Insemination Fresh vs. Frozen Semen

Bree Coxbill

Southeast Jr/Sr High

Torrington, WY

#### **Animal & Plant Sciences - Senior Division**



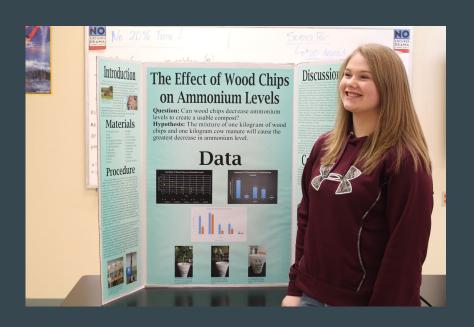
3rd Place

Hyroponics

Kellar Bock

Newcastle High School

#### **Animal & Plant Sciences - Senior Division**



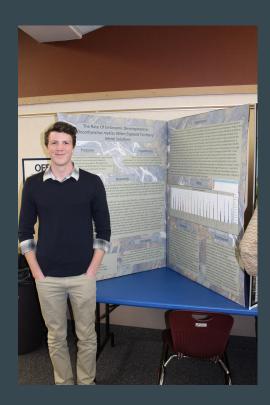
2nd Place

The Effect of Wood Chips on Ammonium Levels

Courtney Rainbolt

Newcastle High School

#### **Animal & Plant Sciences - Senior Division**



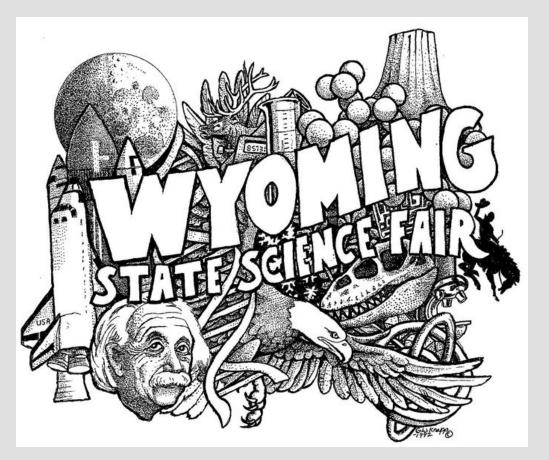
1st Place

The embryonic development of Oncorhynchus Mykiss When Exposed to Heavy Metal Solutions

Colton Curtis

Meeteetse High School

Meeteetse, WY



## Behavioral & Social Sciences

#### **Behavioral & Social Sciences - Junior Division**



3rd Place

When Words Fail Music Speaks

Aiden Chandler and Samuel Belmont

Powell Middle School

Powell, WY

#### **Behavioral & Social Sciences - Junior Division**



2nd Place

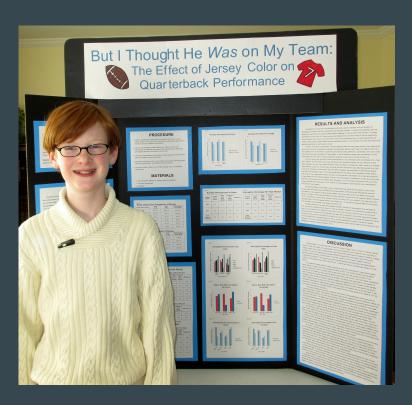
Tall Tales

Gage Gose

Lander Middle School

Lander, WY

#### **Behavioral & Social Sciences - Junior Division**



1st Place

But I Thought He Was On My Team! The Effect of Jersey Color on Quarterback Performance

Colmcille Rottinghaus

Lander Catholic Home School

Lander, WY

#### **Behavioral & Social Sciences - Senior Division**



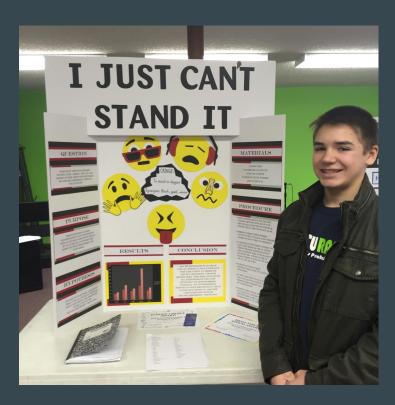
3rd Place

Liar, Liar

Heather Michaelis and Megan Kenney

Newcastle High School

#### **Behavioral & Social Sciences - Senior Division**



2nd Place

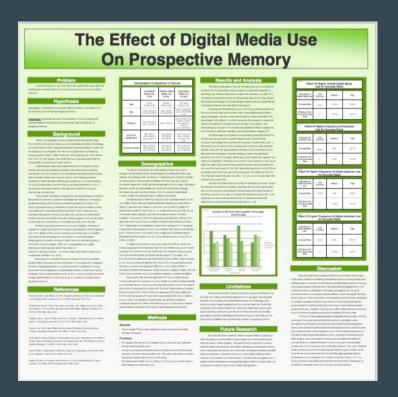
I Just Can't Stand It

Samuel Palmer

Casper Homeschool

Casper, WY

#### **Behavioral & Social Sciences - Senior Division**



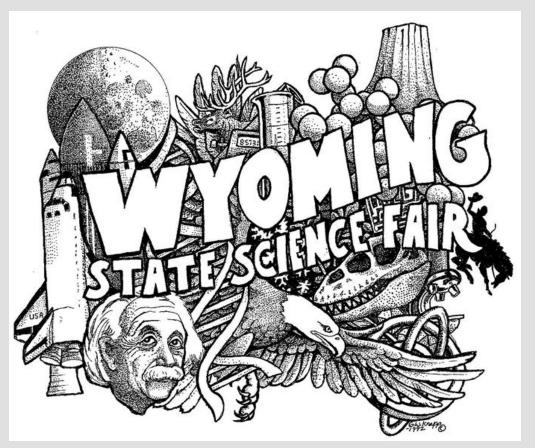
1st Place

The Effect of Digital Media Use On Prospective Memory

Fiachra Rottinghaus

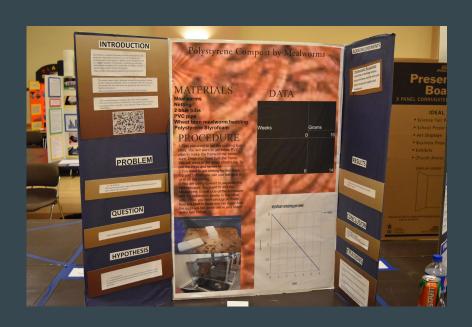
Lander Catholic Homeschool

Lander, WY



## Biochemistry & Biological Sciences

#### Biochemistry & Biological Sciences - Junior Division



3rd Place

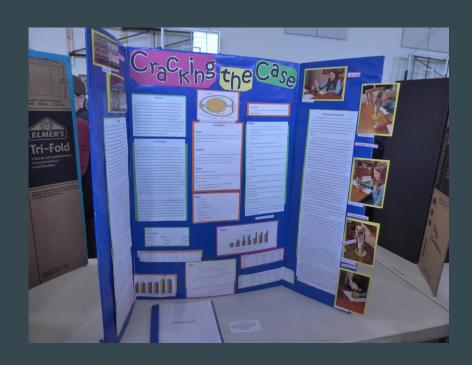
Polystyrene Compost By Mealworms

Weston Haley

Greybull Middle School

Greybull, WY

#### Biochemistry & Biological Sciences - Junior Division



2nd Place

Cracking the Case

Bailey Benson

Wheatland Middle School

Wheatland, WY

#### **Biochemistry & Biological Sciences - Junior Division**



1st Place

The 81mg Flip

Riley Shaw

Lusk Middle School

Lusk, WY

#### Biochemistry & Biological Sciences - Senior Division



2nd Place

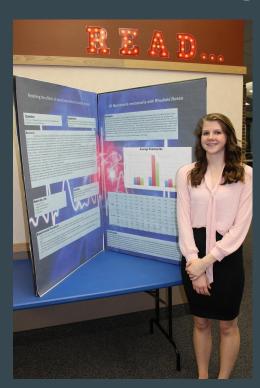
Investigating possible Reduction of Beta-Amyloid Plaques Through the Synergistic Action of Cinnamon and Curcumin

Julianne Carlson

Greybull High School

Greybull, WY

#### Biochemistry & Biological Sciences - Senior Division



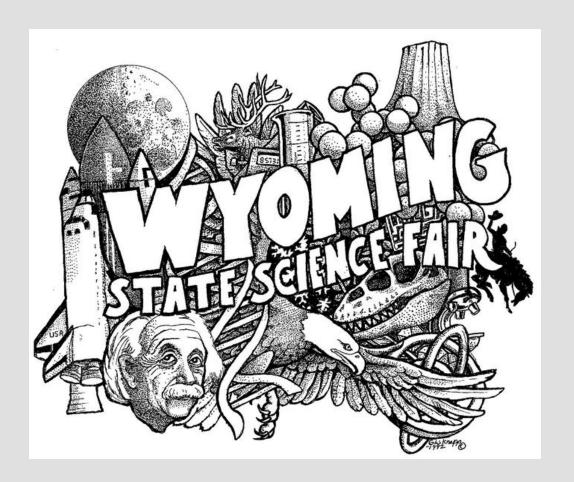
1st Place

Modeling the Effects of Neurotransmitters in the Cardiac Muscle of Mecenari With Rhodiolarosea

**Devon Curtis** 

Meeteetse High School

Meeteetse, WY



### Chemistry/ Energy: Chemical

#### Chemistry/ Energy: Chemical -Junior Division



3rd Place

Got Glow?

Jaycee Myrtle and Sheela Flury

Southeast School

Torrington, WY

#### **Chemistry/ Energy: Chemical -Junior Division**



2nd Place

Once Upon Again: Rechargeable Tin Batteries

Abby Copeland

Lander Middle School

Lander, WY

#### **Chemistry/ Energy: Chemical -Junior Division**



1st Place

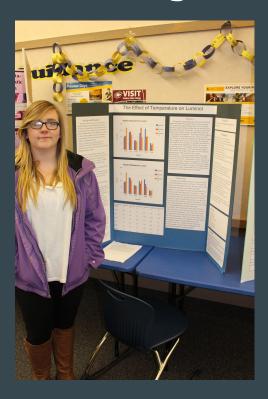
Developing Microbial Fuel Cell

Carlos Munoz and Nathan Maxfield

Big Piney Middle School

Marbleton & Big Piney, WY

#### **Chemistry/ Energy: Chemical -Senior Division**



3rd Place

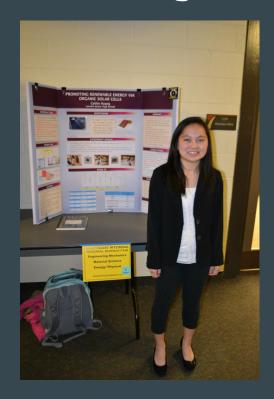
The Effect of Temperature on Alminol

Alicia Brock

Meeteetse High School

Meeteetse, WY

#### **Chemistry/ Energy: Chemical -Senior Division**



2nd Place

Promoting Renewable Energy Via Organic Solar Cells

Caitlin Huang

Laramie High School

Laramie, WY

#### Chemistry/ Energy: Chemical -Senior Division



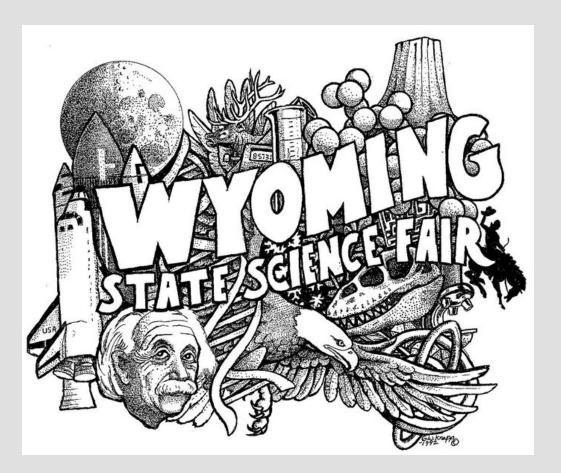
1st Place

Application of Plant Hormones to Microalgae Cultures to Increase the Availability of Lipids for Biofuel Production

Makyela Sorensen

Greybull High School

Greybull, WY



# Engineering Sciences & Energy: Physical

#### **Engineering Sciences & Energy: Physical -Junior Division**



3rd Place

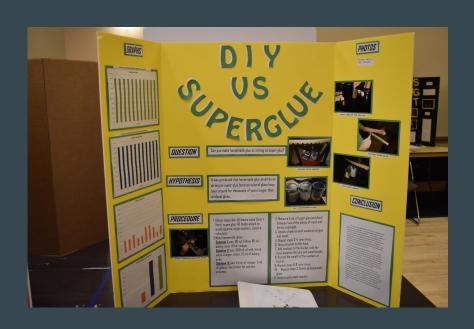
One Rudder Wonder

Charles Koval

Sheridan Junior High

Sheridan, WY

#### **Engineering Sciences & Energy: Physical -Junior Division**



2nd Place

DIY Vs Super Glue

Nathan Ulery

Holy Name Catholic School

Sheridan, WY

#### **Engineering Sciences & Energy: Physical -Junior Division**



1st Place

Delta Power

Ethan Adkins

Pinedale Middle School

Pinedale, WY

#### **Engineering Sciences & Energy: Physical -Senior Division**



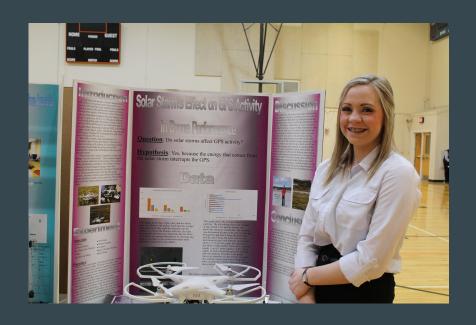
3rd Place

Bend It To The Limit

Bradyn Frye

Newcastle High School

#### **Engineering Sciences & Energy: Physical -Senior Division**



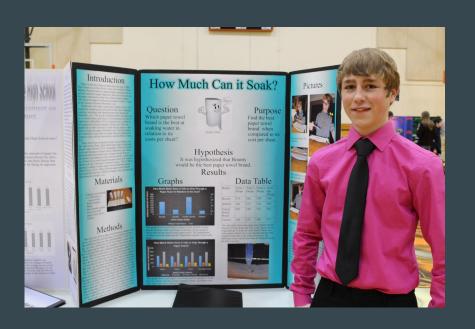
2nd Place

Solar Storm's Effect on GPS Activity in Drone Performance

Alyssa Umphlett

Newcastle High School

#### **Engineering Sciences & Energy: Physical -Senior Division**

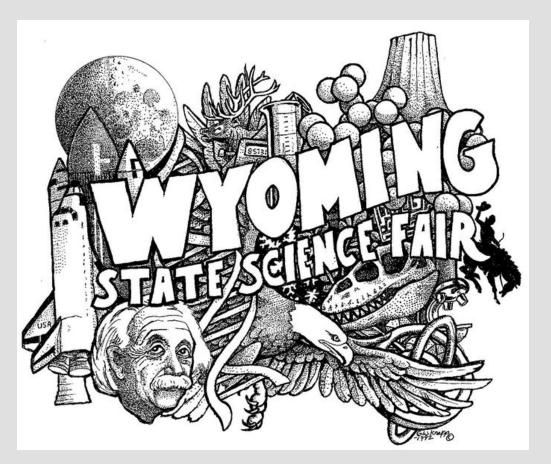


1st Place

How Much Can it Soak?

Jacob Rhoades

Newcastle High School



# Environmental Sciences & Engineering

#### **Environmental Sciences & Engineering -Junior Division**



3rd Place

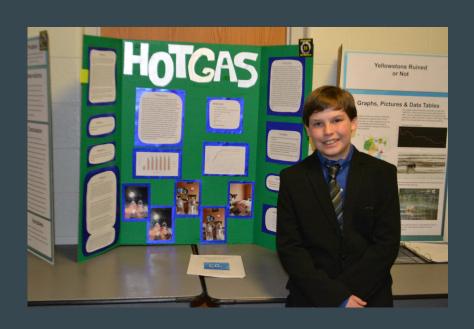
Moovin' For Biodiversity

Sierra Lloyd

Lander Middle School

Lander, WY

#### **Environmental Sciences & Engineering - Junior Division**



2nd Place

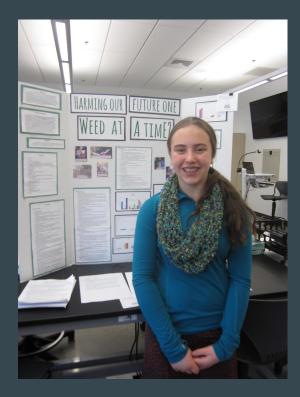
Hot Gas

Evan Anderson

Davis Elementary

Cheyenne, WY

#### **Environmental Sciences & Engineering -Junior Division**



1st Place

Harming Our Future One Weed At A
Time

Mia Copeland

Lander Middle School

Lander, WY

#### **Environmental Sciences & Engineering - Senior Division**



3rd Place

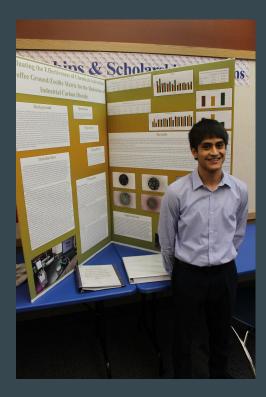
Evaluating The Effectiveness Of A Hydrogel-Fertilizer Matrix To Improve Seed Germination

Dante Sylvester

Greybull High School

Greybull, WY

#### **Environmental Sciences & Engineering - Senior Division**



2nd Place

Evaluating The Effectiveness Of Chemical Activation Of Coffee Ground/Zeolite Matrix For The Reduction Of Industrial Carbon Dioxide

Eduardo Burgos

Greybull High School

Emblem, WY

#### **Environmental Sciences & Engineering - Senior Division**



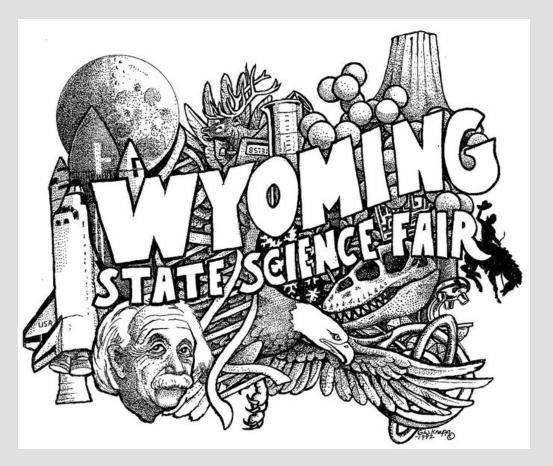
1st Place

Determination Of Soil VOC Content Due To Coal Dust Deposition Along Major Railroad Transportation Routes

Sierra Spears

Lingle-Fort Laramie High

Lingle, WY



#### **Mathematics**

#### **Mathematics - Junior Division**



3rd Place

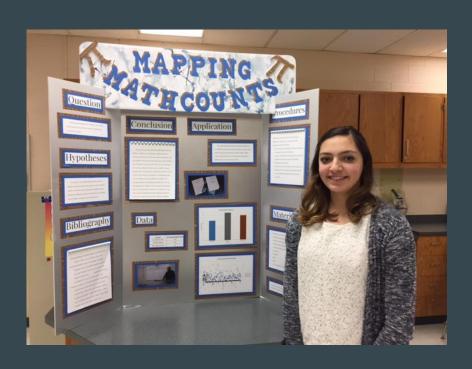
Stepping High

Benjamin Browning

Lander Middle School

Lander, WY

#### **Mathematics - Junior Division**



2nd Place

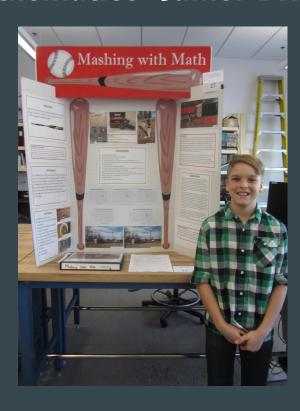
Mapping Math Counts

Preslie Simkins

Pinedale Middle School

Pinedale, WY

#### **Mathematics - Junior Division**



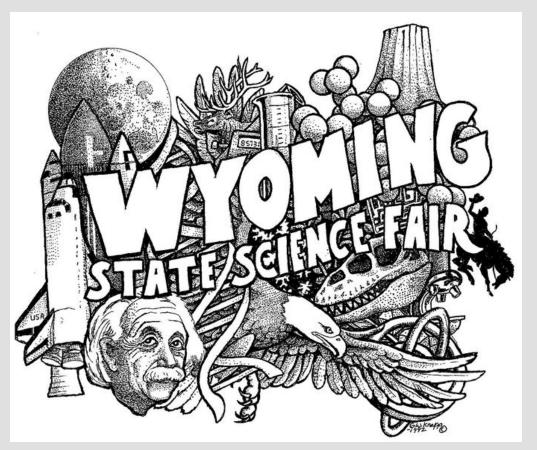
1st Place

Smashing With Math

Gabriel Harris

Lander Middle School

Lander, WY



### Medical Sciences

#### **Medical Sciences - Junior Division**



3rd Place

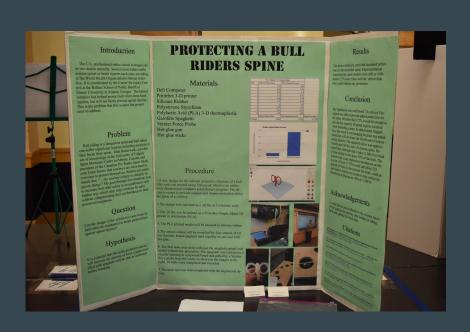
To Mars & Back Again : Designing A Medical 3D Print To Advance Long Term-Human Space Exploration

Jakobi Hibbert

Big Piney Middle School

Big Piney, WY

#### **Medical Sciences - Junior Division**



2nd Place

Protecting A Bull Riders Spine

Isabella Lungren

Greybull Middle School

Greybull, WY

#### **Medical Sciences - Junior Division**



1st Place

Concussion Effects

Riley Schiller and Jace Bohlman

Powell Middle School

Powell, WY

#### **Medical Sciences - Senior Division**



3rd Place

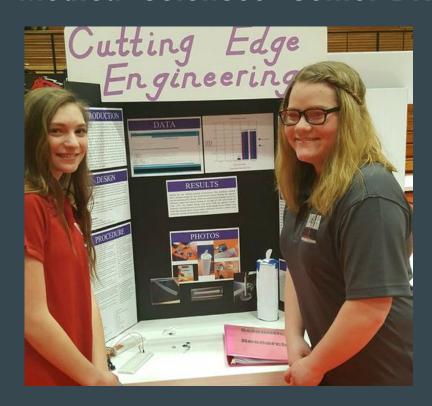
A Swell In "Solution For Obesity"

Arundathi Nair

Laramie High School

Laramie, WY

#### **Medical Sciences - Senior Division**



2nd Place

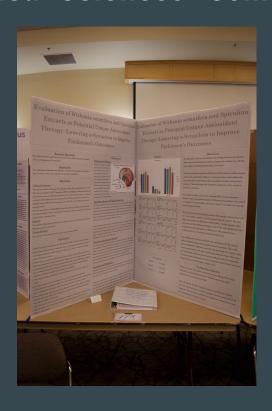
Cutting Edge Engineering: The
Engineering Project Focused On
Creating A Scalpel That Will Prevent
Artery Nicks In Surgery

Adrianna Ruby and Destiny Reed

Big Piney Middle High School

Big Piney, WY

#### **Medical Sciences - Senior Division**



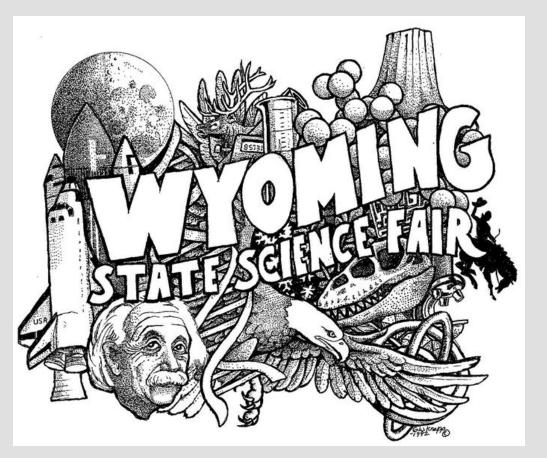
1st Place

Extracts As Potential Unique Antioxidant Therapy: Lowering α-synuclyn to Improve Parkinson's Outcomes

Anna Savage

Greybull High School

Greybull, WY



### Microbiology

#### Microbiology - Junior Division



3rd Place

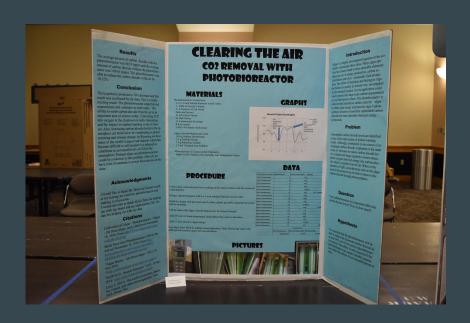
Glo-Away Germs

Sabrina Donaldson

Pinedale Middle School

Pinedale, WY

#### Microbiology - Junior Division



2nd Place

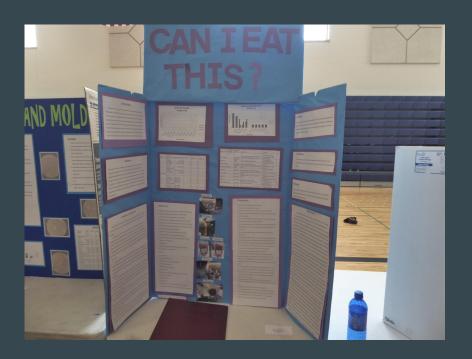
CO<sub>2</sub> Removal with a Photobioreactor

Torrey Sanford

Greybull Middle School

Greybull, WY

#### Microbiology - Junior Division



1st Place

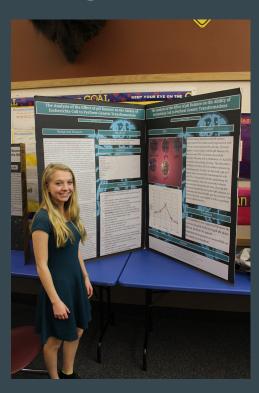
Can I eat this?

Anna Cecil

Wheatland Middle School

Wheatland, WY

#### Microbiology -Senior Division



3rd Place

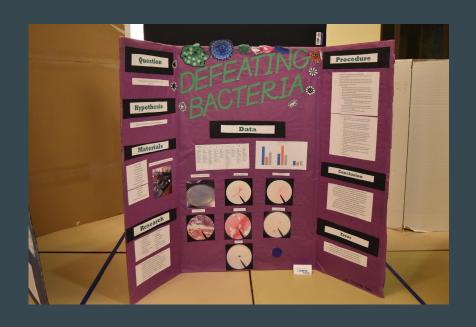
The Analysis of the Effect of pH Balance on the Ability of Escrechea Coli to Perform Genetic Transformations

Merik Votaw

Meeteetse High School

Meeteetse, WY

#### Microbiology -Senior Division



2nd Place

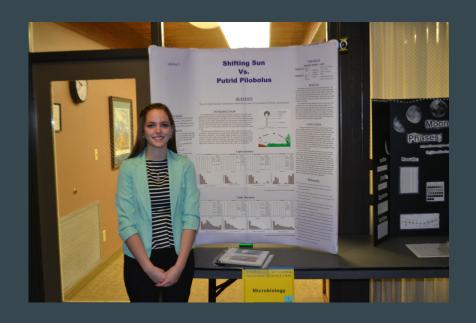
Defeating Bacteria

Cheyenne Hunter

HEM Jr./Sr. High School

Hanna, WY

#### Microbiology -Senior Division



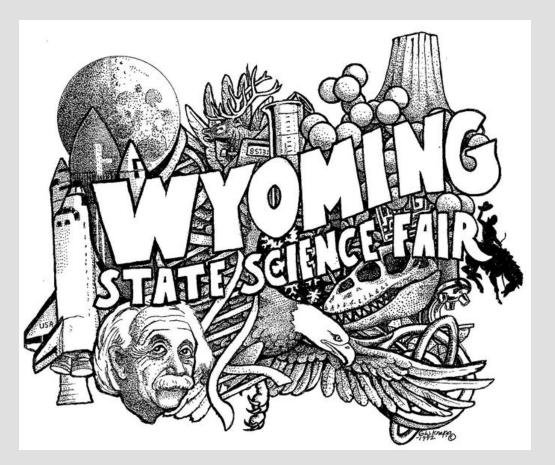
1st Place

Shifting Sun v.s. Putrid Pilobolus

Jennel Mead

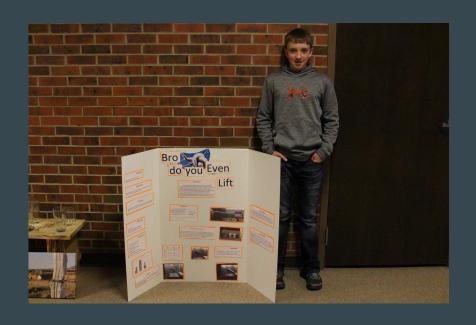
Cheyenne South High School

Cheyenne, WY



## Physics & Astronomy

#### **Physics & Astronomy - Junior Division**



3rd Place

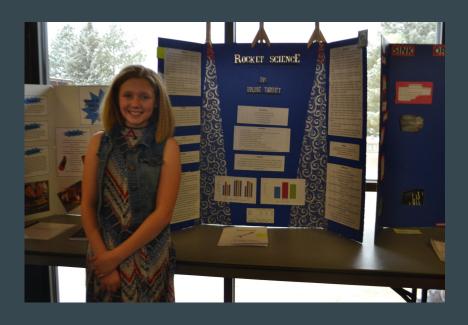
Bro, Do You Even Lift?

Tristan Smith

Saratoga Middle School

Saratoga, WY

#### **Physics & Astronomy - Junior Division**



2nd Place

Rocket SciencE

Brodie Turbitt

Davis Elementary

Cheyenne, WY

#### **Physics & Astronomy - Junior Division**



1st Place

Hit It With Your Best Shot

Danielle Clapper & Carly Keller

Southeast Schools

Veteran & Torrington, WY

#### Physics & Astronomy - Senior Division



3rd Place

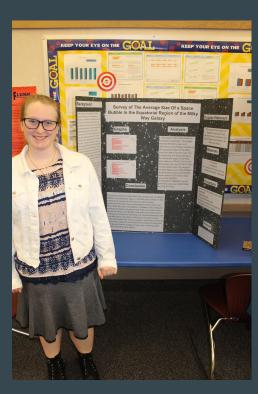
The Effect of Potassium Nitrate on Rocket Fuel

Hunter Liggett

Newcastle High School

Newcastle, WY

#### Physics & Astronomy - Senior Division



2nd Place

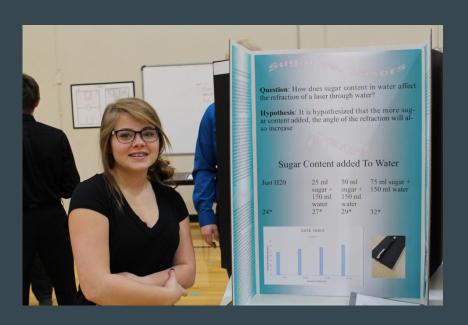
The Average Size of the Space Bubbles in the Equatorial Region of the Milky Way Galaxy

Amanda Cooley

Meeteetse

Meeteetse, WY

#### **Physics & Astronomy - Senior Division**



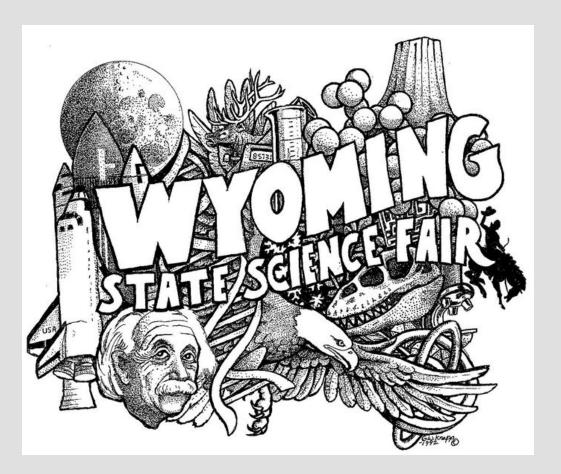
1st Place

Sugar vs. Lasers

Johnna Dawson

Newcastle High School

Newcastle, WY



# Robotics & Computer Sciences

#### Robotics & Computer Sciences - Junior Division



3rd Place

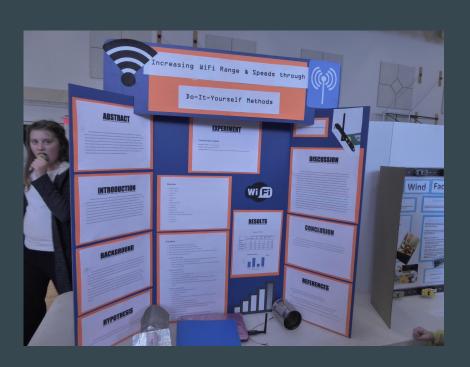
Cymatics

Addison Braten

Powell Middle School

Powell, WY

#### **Robotics & Computer Sciences - Junior Division**



2nd Place

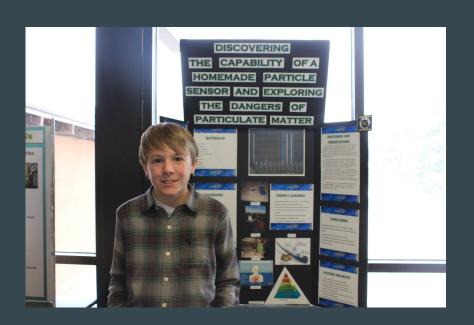
Increasing WiFi Range and Speeds through Do-It-Yourself Methods

Quinton Lawrence

Wheatland Middle School

Wheatland, WY

#### Robotics & Computer Sciences -Junior Division



1st Place

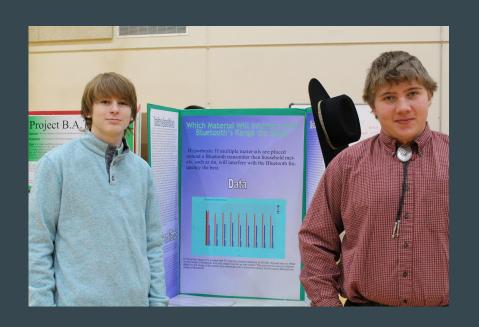
Discovering the Capability of a
Homemade Particle Sensor and
Exploring the Dangers of Particulate
Matter

Kyland Fuller

Lingle-Ft.Laramie Schools

Ft. Laramie, WY

#### Robotics & Computer Sciences -Senior Division



3rd Place

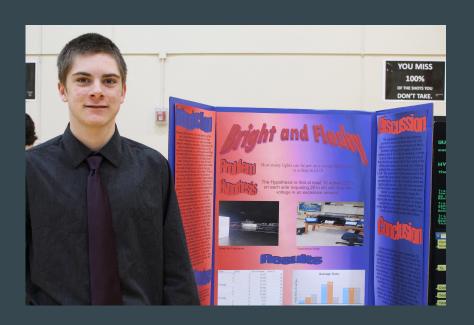
Which Material Will Effect The Bluetooth Range The Most?

Kaden Curren & Talon Logan

Newcastle High School

Newcastle, WY

#### Robotics & Computer Sciences -Senior Division



2nd Place

Bright and Flashy

Garrett Merchen

Newcastle High School

Newcastle, WY

#### Robotics & Computer Sciences - Senior Division



1st Place

Implementing New Methods of Prosthetic Control

Qingfeng Li

Laramie High School

Laramie, WY



