FIRST PLACE

Diamagnetic Water Filtration Tyler Ethier, BArT Charter School

Smart House: Utilizing Embedded Electronics for Efficient Living Alison Adamski, Westfield High School

SECOND PLACE

Skin Grafting is the New Band-aid Alyssia Bonacquisti & Haley Milne, Taconic High School

To Clot or Not Chloe-Rae Wood, Taconic High School

When Life Gives You Lemons Roberta Croshier, Taconic High School

Magnapole Jill Scussel, Taconic High School

Pollution's Effect on Quorum Sensing in Vibrio fischeri Kerstin Johnson & Lydia McKnight, Taconic High School

The Effects of Organic Antibacterials on *E. coli* David Gorestki, Denisolt Shakhbulatov, & Henry Bang, The MacDuffie School

The Effect of a Static Magnetic Field on *B. cereus* and *E. aerogenes*

Bogdan Znakharchuk & Ilona Znakharchuk, Westfield High School

Power Struggle: An Exploration into the Effectiveness of Batteries and Fuel Cells as an Energy Source Jonathan Huntley, Westfield High School

The Effect of Aquaponics on Farming vs. Traditional Farming Methods Kailyn LaPointe, Kaitlyn Moran, Westfield High School

How Orange is your Orange take 2 Noah Chicoine, BArT Charter School **Standard Airfoil Design vs. Dimpled Airfoil Design** Graciana Phillips & Leena LaFlamme, Westfield High School

Artificial Pancreas Circuit Model Kristen Stawasz, Westfield High School

THIRD PLACE

Cleaning our Soil the Natural Way Sarah Cicchetti, Taconic High School

You Are What You Eat Sarah Tierney, Taconic High School

Altering Enzymes Tessa Langsdale, BArT Charter School

The Danger of Dark Lightning Evan Kalinowsky, Taconic High School

Medicine and Caffeine at the Same Time: Safe or not? Zoia Zahid, Taconic High School

The Crouton Fork Emily Kestyn, Riley Nichols, & Camry Francoeur, Pittsfield High School

Developing a Wing Design to reduce Air Pressure Vorticies in Flight Liam Coffey &Zachary Medeiros, Westfield High School

Liam coney & Zachary Medenos, westheid High School

The Effects of Surface Topography on Biofilm Growth Gisele Andree, Benjamin Crevier, & Victoria Courchesne, Minnechaug Regional High School

More Stable Charger Cord Leah Tanzman, Taconic High School

Testing the Efficiency of Storm Surge Barriers Hannah Bone, Westfield High School

Algal Strains and Biofuel Production

Christopher Clark, Westfield High School

Finding the most efficient waste product for the production of biogas through anaerobic digestion Devon Kurtz & Francesco Liucci, Westfield High School

Epinephrine, Herbal Supplements, and Heart Rate Samantha Walter, Taconic High School

HONORABLE MENTION

Exponentiality Harrison Todd, BArT Charter School

Absorption of Radiant Energy by Different Colors Lauren Cornell, BArT Charter School

Pass the salt; a working study of desalination AJ Morrissette, BArT Charter School

The Effect of Bottle Bulbs on Basil Plants

Elizabeth Levesque, Hoosac Valley High School

Gender Analysis of Mice

Katara Mullett, Pittsfield High School

Foot shape correlation to dominant origin Emily Taylor, BArT Charter School

Tracking a Golf Ball Using Bluetooth Joshua Coleman & Timothy Curry, Taconic High School

Effectiveness of Angles of Vertical Breakwater Openings in Wave Attenuation Jacob Curran, Westfield High School

Olfactory Distinction in Butterflies

Cassidy Pawul, Westfield High School

Focused on the Future: CPV Technology

Brian Davis & Eric Shilyuk, Westfield High School

Pool Covers!

Shawn Farnham, Westfield High School

Developing a cost effective way to build a wind turbine

Kaleigh Florek & Laura Paye, Westfield High School

Tactical Operators' Magnetic Attachment System

Andrew Chenail, Taconic High School