

2011 Glenelg High School Science Fair

The Science Department at Glenelg High School is pleased to announce the official winners for our school-based science fair held February 3rd, 2011. The fair was the culmination of 140 team and individual projects completed by about 150 of our science students, and represents the best work we have witnessed in the history of the science fair at Glenelg. It was judged by over 50 volunteers from the community, many of whom are Ph.D. scientists and engineers, medical doctors, and other technical professionals. We offer our most sincere thanks to the students, parents, judges, teachers, and staff members who made this possible. The winners are:

First Place Overall

Jake Bandel – Hydrogen Additives in Engines

Second Place Overall

Marissa Gochar – The Effect of Lycopene on Short Term Blood Pressure

Third Place Overall

Paul Garvey – Difference Between the Boeing and Airbus Winglet

Category Ribbons

Animal Biology

1st Place – **Grace Daigle** – Diving: The Effect of Height on Rotation

2nd Place – **Morgan Mazer** – The Effect of the Degree the Knee is Bent on Vertical Jump Height

3rd Place – **Amanda Hoyt** – Do Horses See Colors?

Behavioral Science

1st Place – **Marissa Gochar** – The Effect of Lycopene on Short Term Blood Pressure

2nd Place – **Madeeha Lughmani** – The Effect of Neurobics on Cognitive Learning

2nd Place – **Leigh Oehrig** – The Effect of Musical Training on Basic Memory as Shown in Autistic Savants

3rd Place – **Molly Rye** – Your Choice or Mine?

Chemistry

1st Place – **Ashley Basgier** – The Effect of Common Drinks on the Decay of Teeth

2nd Place – **William Fiege** – The Photovoltaic Extraction of Hydrogen from Water

2nd Place – **Morgan Philie** – The Effect of Milk Fat Percentage on the Amount of Coagulation

Computer Science

1st Place – **Ryan Manning** – Statistical Strategy: Numerical and Efficiency Analysis in Military War-Gaming

2nd Place – **Robert Mason** – Modeling H1N1

Engineering Technology

- 1st Place – **Jake Bandel** – Hydrogen Additives in Engines
- 1st Place – **Paul Garvey** – Difference Between the Boeing and Airbus Winglet
- 2nd Place – **Grant Schultheis** – The Effect of Distance to Target on the Rangefinder for Navigation
- 3rd Place – **Andrew Desrochers** – The Effect of the Initial Angle of Attack and Wing Area of a Glider on Its Flight Distance

Environmental

- 1st Place – **Grant Whitman** – The Effect of Plants on Nitrogen Absorption in Watershed Environments
- 2nd Place – **Patrick Faustino** – An Analysis of the Humic to Non-Humic Material Ratio in Mulches and Composts in order to Assess the Potential for Metal Binding
- 3rd Place – **Christopher Winter** – The Effect of Water Hardness of the Growth of Euglena
- 3rd Place – **Paul Alden** – The Effect of Gray Water on the Growth of Pea Plants

Microbiology

- 1st Place – **Alison Piwowarski** – Carbon Content of Alcohols and Bacterial Growth
- 1st Place – **Harry Rahn** – The Effect of Genetic Variety on Adaptation
- 2nd Place – **Paige Ensor** – Rainrot
- 3rd Place – **Kaila Burns-Heffner** – Sugar vs. Splenda

Physics

- 1st Place – **Jacob Liming** – The Effect of Diameter of a Laser Etched Circle on the Bottom of a Glass on the Width of Head on a Poured Carbonated Drink
- 2nd Place – **Alyssa Sumpter** – Angle on Impact: Is there a difference?

Plant Biology

- 1st Place – **Julianna Boswell** – Allelopathy: The Effect of Allelotoxin Concentration on Plant Growth
- 2nd Place – **Jack Hayden** – The Effect of the Amount of Lignin on Burn Temperature
- 3rd Place – **Noah Congedo** – Salinity Tolerance Level of Various Types of Grasses