



## 2016 Student Research Showcase Section Winners

### Biochemistry

[Development of a Novel Antiseptic Combination to Target MRSA and Pseudomonas](#)

Janie Kim, Scripps Ranch High School

### Cellular and Molecular Biology

[Validating an Electroconvulsive Assay for Anti-Epileptic Drug Screening Using Drosophila melanogaster and Protein Kinase G](#)

Matthew Dardet, Pine Crest School

### Chemistry

[Characterizing Substrate Specificity of Dopamine and Ascorbic Acid via Cyclic and Differential Pulse Voltammetry using Nitrogen-doped Porous Carbon and Graphene Based Electrodes](#)

Malini Basu, Pine Crest School

### Ecology & Evolutionary Biology

[Functionality of the spotted salamander egg mass polymorphism](#)

Matthew Pintar, University of Mississippi

### Engineering

[Synthesis and Application of Cost-Effective, Biomimetic Hydrogel Scaffolds Doped with Nanoscale Graphene Oxide: a Novel Approach to Cancer Therapy, Tissue Engineering, and Drug Delivery](#)

Arvind Sridhar, Bellarmine College Preparatory

## **Human Behavioral & Social Sciences**

[Perception about Autism: An International Study](#)

Esha Aneja, Dougherty Valley High School

## **Physics & Astronomy**

[An Automated Search for Gravitationally Lensed Quasars in the Sloan Digital Sky Survey](#)

Pranav Sivakumar, Illinois Mathematics and Science Academy

## **Math and Computer Science**

[Audio Classification of Humans in Distress](#)

Matthew Stern, The Bronx High School of Science

## **Physiology & Immunology**

[Drying without dying—Resurrection fern, \*Pleopeltis polypodioides\*](#)

Susan P. John, University of Louisiana at Lafayette

## **Environmental Sciences**

[A Greener Cleaner: Investigating a Potential Biosorbent for the Removal of Heavy Metals from Aqueous Solutions](#)

Ananya Karthik, Saint Francis High School

For Division winners and more information on Sigma Xi's 2016 Student Research Showcase, please go to the [results announcement](#).