



## Regeneron ISEF 2022 Grand Award Winners

Best in Category \$5,000, First \$3,000, Second \$1,500, Third \$1,000, Fourth \$500

	Award	Name	School	Title
<b>H. Robert Horvitz Prize for Fundamental Research</b>	<b>\$10,000</b> This award is given to the project that represents the best in fundamental research that furthers our understanding of science and/or mathematics and promotes the understanding of natural phenomena without clearly defined applications towards processes or products in mind.	<b>Rebecca Cho</b>	Jericho High School	<i>Reconstruction Modeling Using Tectonics and Climate of Western North America</i>
	<b>Third</b>	<b>Sarah Schubel</b>	Smithtown High School East	<i>Loss of NMDA Receptor Signaling Results in Excess Proliferation of CNS and Neural Crest-Derived Cells</i>
<b>Animal Sciences</b>	<b>Third</b>	<b>Sarah Schubel</b>	Smithtown High School East	<i>Loss of NMDA Receptor Signaling Results in Excess Proliferation of CNS and Neural Crest-Derived Cells</i>
	<b>Fourth</b>	<b>Kyle Kavully</b>	Plainedge High School	<i>American Dream or American Myth? A Linear Regression Analysis of American Attitudes as a Factor of Race and Ideology</i>
<b>Behavior &amp; Social Sciences</b>	<b>Fourth</b>	<b>Kyle Kavully</b>	Plainedge High School	<i>American Dream or American Myth? A Linear Regression Analysis of American Attitudes as a Factor of Race and Ideology</i>
	<b>Second</b>	<b>Griffin Hon</b>	Syosset High School	<i>Repurposed Cephalexin Causes Multifaceted Pro-Cancer Effects by Way of Wnt Signaling Pathway</i>
<b>Biomedical and Health Sciences</b>	<b>Second</b>	<b>Griffin Hon</b>	Syosset High School	<i>Repurposed Cephalexin Causes Multifaceted Pro-Cancer Effects by Way of Wnt Signaling Pathway</i>

<b>Biomedical Engineering</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	Third	<b>Natalia Pahlavan</b>	Jericho High School	<i>Automatic Diagnosis of Cardiovascular Disease: 12-Lead Electrocardiogram and Elucidating Sex Differences via Deep Learning</i>
<b>Cellular and Molecular Biology</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	Third	<b>Miah Margiano</b>	Saint Anthony's High School	<i>LncRNAs Influence on NK Cells: Potential Therapeutic Target for Neuroblastoma</i>
<b>Chemistry</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	Third	<b>Alex Wang</b>	<b>Syosset High School</b>	<i>Computational Assessment of Macrocyclic Host-Guest Ion-Dipole Interactions With Negative Pores</i>
<b>Computational Biology</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	First	<b>Kevin Zhu</b>	<b>Jericho High School</b>	<i>Recurrent Repeat Contractions: Investigating a Novel Genomic Factor of Polymorphism in 10 Human Cancers</i>
	Third	<b>Amber Luo</b>	<b>Ward Melville High School</b>	<i>RiboBayes: Assessing the Transcriptome-Wide Expression of Ribosome Pause Sites in Ribosome Profiling Data With Bayesian Wavelet Thresholding</i>
<b>Earth and Environmental Sciences</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	First	<b>Rebecca Cho</b>	Jericho High School	<i>Reconstruction Modeling Using Tectonics and Climate of Western North America</i>
	Second	<b>Tarunika Sasikumar</b>	Plainview-Old Bethpage John F. Kennedy High School	<i>Assessing the Efficacy of the U.S. Endangered Species Act Through the Novel Quantification of Species Charisma and Respective Population Trends</i>
<b>Embedded Systems</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	First	<b>James Nagler</b>	Garden City High School	<i>Project Vision: Virtual Environment Through Artificial Intelligence Recognition</i>
<b>Environmental Engineering</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	Third	<b>Emily Kim</b>	Jericho High School	<i>RB5 Dye Removal Using Activated Carbon Under UV Irradiation</i>
<b>Mathematics</b>	<b>Award</b>	<b>Name</b>	<b>School</b>	<b>Title</b>
	Third	<b>Daniel Salkinder</b>	<b>Half Hollow Hills High School East</b>	<i>Nxnxn Rubik's Cubes and God's Number</i>

	Award	Name	School	Title
<b>Microbiology</b>	Third	Laxshanna Raveendran	Commack High School	<i>Characterizing the Secretion of the Francisella tularensis Protein FTL_1123</i>