

# SEFMD 2021 Grand Award Winners

Division	Name	Grade	School Name	Teacher Name
	Category		Title	
Division E	Zia'area Currie	5	Thirkell ELEMENTARY School	Connie Atkisson
	Physical Sciences, Individual Projects		Which alternative Form of Energy is the Most Efficient Way to Power a Generato	
Division J	Imani Smith	7	Nolan Elementary-Middle School	Krystal Bolar
	Engineering (including Mechanics, Environmental, Biomedical)		A green infrastructure:Bioswales	
	Rishi Chowdhury	7	Independent Student	S Chowdhur
	Plant Sciences		Combining Spectrums for Ideal Plant Growth	
	Emmanuel Hurtado-garcia	6	Clippert Academy Middle School	Tracy Orti
	Renewable Energy		The Efficiency of Turbine Rotor Designs	
	Eashan Daram with Nirvan Daram Team	8	Novi Middle School	Kim Osmonson
			Which Materials Interfere With Wi-Fi Connections	
	Tanay Panja	7	Clague MS	Priyanka Meharia
	Technology & Robotics		Raspberry pi based access control using machine learning and image recognition	
Division S	Nicholas Kalkanis	11	Detroit Country Day Upper	Duha Fahmy
	Biomedical & Health Sciences		Evaluation of Raman Spectroscopy Probe in the Diagnosis of Brain Tumors	
	Angela Xu with Ethan Chen and Jonathan Chen	11	Troy High School	Rebecca Brewer
	Biomedical Engineering		Non-contact Continuous Cardiovascular Monitoring System	
	Akshith Pulgam	11	Pioneer HS	Steve Armstron
	Biomedical Engineering		Can a Glove Stop Heart Attacks?	

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Diya Ramesh Computational Biology & Bioinformatics	10 Sputum-Based mRNA-Targeting Probes in Lung Cancer - An Early Diagnostic Tool	International Academy	Renee Kiriazis
Margaret Yang Energy	11 Engineering Multi-Enzyme Whole-Cell Biocatalysts for Biofuel Production	Cranbrook Kingswood Upper School	Stephanie Kokoszka
Michelle Hua Robotics & Intelligent Machines	10 Dilated Silhouette Convolutional Neural Network for Human Action Recognition	Cranbrook Kingswood Upper School	Allwyn Cole
Mikul Saravanan Robotics & Intelligent Machines	10 Smart robot to purify, humidify and disinfect the air	Cranbrook Kingswood Upper School	Stephanie Kokoszka
Pooja Kannappan Translational Medical Science	11 Investigating Differential Gene Regulation in the PBMC of Obese Adolescents	Bloomfield Hills High School	Noelle Collis
Audrey Gunawan Translational Medical Science	12 Developing an Opioid Painkiller Alternative using the Epigenetic Correlation b	West Bloomfield High School	Nic Fraylick