MSEF Category Awards by Place (revised 4/15/2022)

Award	CertificateName	Grade	Title	Teacher
	School			

Grand

	Michelle Hua	11	Consistency-based Self-Supervised Neural Network for 3D Motion Reconstruction	
	Cranbrook Kingswood Upper School			Stephanie Kokoszka
	Kush Parikh with Timothy Mathew	10	COVision: CNN for Classification of COVID-19 and Non-Viral Pneumonia Using CTs	
	Troy High School			Rebecca Brewer

First Place

	Margaret Yang	12	Engineering Compositionally Uniform Whole-Cell Biocatalyst for Biofuel	
	Cranbrook Kingswood Upper School			Stephanie Kokoszka
	Donald Liveoak	12	Schrödinger Bridges on Discrete Domains	
	Allen Park Senior High			Larry Dunlap

Second Place

	Mikul Saravanan	11	Novel Multipurpose Air Handling Robot with AI-Based Anomaly Detection	
	Cranbrook Kingswood Upper School			Stephanie Kokoszka
	Yun Du	11	Angular Momentum-Driven Circular Rotatable Ocean Robot	
	Cranbrook Kingswood Upper School			Stephanie Kokoszka
	Vikram Goddla	10	AI Solution for Effective Treatment Planning for Brain Tumor Patients	
	Detroit Country Day Upper			Patricia Hanlan
	Owen Dong	11	Arsenic toxicity, accumulation, and biotransformation in Agaricus bisporus	
	Rochester Adams High School			Eric Lohr
	Glen Warren	12	Practical Gesture Recognition for Computer Control	
	Dearborn Center for Math, Science & Technology			Jennifer Gorsline

Third Place

	Kiera Washington	11	Daphnia magna in Surface Runoffs	
	Davis Aerospace Technical High School			Sharon Holloway
	Brian Zhang	9	Mental Stress Detection in Social Media - A Machine Learning Approach	
	Northville High School			Gabriel Pak

	Sonnet Xu	11	Drought Affects Mangrove Recovery Patterns Following Hurricane Irma
	Troy High School		Rebecca Brewer
	Rahul Barpanda	12	Tranilast Mitigates ER Stress-induced RPE Cell Dysfunction in AMD
	Detroit Country Day Upper		Karen Lamb
	Jiawei Chen	11	Robotic Tuna Fish and Study of Improving Underwater Locomotion
	Cranbrook Kingswood Upper School		Stephanie Kokoszka
	Connor Kalkanis	10	A Novel Silver Bullet to Kill Cancer Cells
	Detroit Country Day Upper		Lara Mcmillan

Fourth Place

	Zijie He	11	A New Method of Footprint Identifier Based on Deep Learning
	Cranbrook Kingswood Upper School		Stephanie Kokoszka
	Dillan Lau	12	Pneumonia Detection through Advanced Machine Learning
	Detroit Country Day Upper		Rami Baroodi
	Trinity Chen	10	Early Diagnosis of COPD Using Analysis of Single-cell RNA Sequencing
	Detroit Country Day Upper		Marc Fazio
	Diya Ramesh	11	Urine-Based Breast Cancer Detection Using miRNA-Targeting Molecular Beacons
	International Academy		Megan Phillips
	Nicholas Frieler	11	The Use of Collision-Induced Dissociation in Differentiating Isomers
	Detroit Country Day Upper		Laura Luckins
	Raghav Subramaniam with Krish Desai	10	Employing Partial Augmented Reality and Chorded Keyboard Input Methods to Devel
	International Academy-East Campus		Jackie Toepel
	Isabella Cook	11	Covid-Driven Reliance on Digital Communication and Teens
	Detroit Country Day Upper		John Dougherty
	Rohit Mahesh	9	Can your shoe detect concussion?
	Salem High School		Marcia Lizzio
	Sanjana Duttagupta	10	RevealTheIngredient: A Novel Ingredient-Label Computer Vision Application
	Northville High School		Karin Nelson