



Louisiana State Science & Engineering Fair 2023

Senior Division Results

April 5, 2023

Louisiana State University



Animal Sci	ences					
	1		П			The Prevalence of Ophryocystis elektroscirrha
						Infection in the Southern Louisiana Danaus
1	St. Amant	Riley	11	St. Joseph's Academy	AN-51001	plexippus Population
			1			The Effect of Pollen Taste on Visitation Rates of the
2	Keller	Jacelyn	11	St. Joseph's Academy	AN-51002	Apis Mellifera
	1					Testing Pomacea bridgesii eggs with different time
3	Martin	Bryce	11	Isidore Newman School	AN-51012	variables
		,	1			Testing Pomacea bridgesii eggs with different time
3	Reddy	Rohan	11	Isidore Newman School	AN-51012	variables
4	Martin	Adriana	10	Loyola College Preparatory School	AN-51008	How do Elephants Regulate Their Body
Behavioral	& Social Sci	ences			•	
	1		П			The Effects of Methamphetamine on Brain
						Microvascular Endothelial Cell Structure and
1	Manikandan	Shrivats	9	Caddo Parish Magnet High School	BEH-52004	Function in the Blood Brain Barrier
						Using Artificial Fixation Points to Increase the
2	Chanda-Rastogi	Keya	10	Baton Rouge Magnet High School	BEH-52002	Reading Speed of Select Populations
	1	,		0 0		Psychological Well-Being, Negative Affect, and Slee
3	Michael	Katherine	12	Caddo Parish Magnet High School	BEH-52006	Quality in relation to brain structure
						A Machine Learning Approach for Detecting
4	Yu	Peter	10	Louisiana School for Math Science the Arts	BEH-52003	Depression among College Students
						The Effect of Anxiety, Depression, and OCD on the
	DeCarlo	Ellie	11	St. Joseph's Academy	BEH-52001	Severity and Consistency of Trichotillomania
Honorable						The Correlation of Cognitive Functions and Video
Mention	Fairchild	James	11	Patrick F. Taylor Science Technology Academy	BEH-52005	Game Play
Biochemis	try	•			•	
	I		П			The Influence of T2R Status on SARS-CoV-2
1	Beach	Mary Ellis	10	St. Joseph's Academy	BC-53001	Outcomes in a High School Population
2	Williams	Jaymon	9	John Curtis Christian	BC-53005	Does Temperature Affect the ph of Orangre Juice
						The Lack of Neurogranin Affects Mitochondria
3	Wright	Kasen	12	Southwood High School	BC-53004	Dynamics
4	Kirkpatrick	Christopher	12	Southwood High School	BC-53003	Inhibition of ADCK! gene expression in liver cancer
Biomedica	l & Health So	iences				
	1					CaSR-GSH Interaction: Finding an Effective
1	Letchuman	Raj	12	Caddo Parish Magnet High School	BM-54009	Antagonist
						Adolescents' dietary quality, cardiometabolic risk,
2	Hu	Kathy	11	Episcopal School of Baton Rouge	BM-54002	and adiposity: A prospective cohort study
						Which remedies can help women manage
3	Abed	Saja	11	New Orleans Charter Science and Mathematics HS	BM-54007	menstrual cramps?
						Which remedies can help women manage
3	Triminio	Staicy	11	New Orleans Charter Science and Mathematics HS	BM-54007	menstrual cramps?
						Comparing Manual and Mechanical Heads-Up
4	Alwood	Sela	10	St. Joseph's Academy	BM-54001	Cardiopulmonary Resuscitation



	Engineerir	ıg				
						Soft Robotic Assembly of Three-Dimensional
1	Penales	Karlo	11	Loyola College Preparatory School	BE-55004	Printed Capsules to Aid with the Visually Impaired
						Generation of 3D Co-Cultured Breast Cancer
						Spheroids to Study the Spatial Distribution of
2	Moe	Margaret	12	St. Joseph's Academy	BE-55002	Fibroblast-Produced Collagen
						Multimodal Label-Free Monitoring of Stem Cell
3	Zapata	Laura	11	St. Joseph's Academy	BE-55001	Differentiation: Confocal Microscopy
						Fighting for Stethoscopes: Creating a Medical
4	Oyuela	Catherine	12	Kenner Discovery Health Sciences Academy	BE-55005	Instrument for War Zones
						Fighting for Stethoscopes: Creating a Medical
4	Quintero	Doris	12	Kenner Discovery Health Sciences Academy	BE-55005	Instrument for War Zones
						3D Printing Models of the Circle of Willis for
	Livingston	Lexi	12	Southwood High School	BE-55006	Endovascular Planning and Practice
Honorable	Livingston	ECAI	12	Southwood High School	BE 33000	Endovascular Flamming and Fractice
	Carroll	Courtney	12	Cabrini High School	BE-55003	Anchor Needle
	Molecular E		1 1	casilii iligii sancai	DE 33003	Autorior recedie
		1	ТТ		T	Effects of SOD2 Mimetic (BMX-001) on Myocardial
1	Miller	Chloe	12	C.E. Byrd High School	CE-56006	Ischemia Reperfusion Injury
-	ivillei	Cilide	12	C.E. Byrd High School	CL-30000	Single Cell Analysis of Deubiquitinating Enzyme
						(DUB) Activity in a Microfluidic Droplet Trapping
2	Douisoddu	Vodo	11	Poton Pougo Magnet High Cohool	CE EC003	
2	Devireddy	Veda	11	Baton Rouge Magnet High School	CE-56002	Array Age-Related BDNF and pTrkB following Cerebral
_			1			· · · · · · · · · · · · · · · · · · ·
3	Jones	Whitney	12	Southwood High School	CE-56005	Ischemia
						How a S. aureus Protein Manipulates Human
4	Yang	Alexander	9	Baton Rouge Magnet High School	CE-56001	Leukocytes
	Cao	Emily	11	Terrebonne High School	CE-56003	Rising in the Yeast
	Holliday	Chloe	12	Kenner Discovery Health Sciences Academy	CE-56004	Anti-Inflammatory Drug Solubility
Honorable		L .	1			A 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Mention	Nawaz	Saarah	12	Kenner Discovery Health Sciences Academy	CE-56004	Anti-Inflammatory Drug Solubility
hemistry	•				•	
						Can Cleaning Agents Inhibit the Detection Ability o
1	Simmons	Merrin	11	John Curtis Christian	CH-57005	Luminol
						PRESERVING AQUATIC LIFE FROM THE HARMFUL
2	Chiruguru	Susanna	10	LaGrange High School	CH-57003	EFFECTS OF OCEAN ACIDIFICATION
	LeBoeuf	Cody	11	South Terrebonne High School	CH-57004	Rocket Ready Go!
3	i				CH-37004	
						·
	Mayeux	Zaira	10	St. Joseph's Academy	CH-57004	The Effect of Aqueous Organic Matter on BOD Leve
3		Zaira		St. Joseph's Academy	CH-57001	The Effect of Aqueous Organic Matter on BOD Leve
3	Mayeux Knoebel	Zaira Ruby	10			The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega
3	Knoebel Haughton		10 11 9	St. Joseph's Academy	CH-57001	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks
4	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic	10 11 9	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega
4	Knoebel Haughton Mistretta	Ruby Kyleigh	10 11 9	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks
4	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic	10 11 9	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks
4	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic	10 11 9	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks Common Beverages and their acidity
4	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic	10 11 9	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008	The Effect of Aqueous Organic Matter on BOD Leve The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells
3 4 omputatio	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic y & Bioinfo	10 11 9 11 matic	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008 CH-57007	The Effect of Aqueous Organic Matter on BOD Leven The Decomposition of Plastics in Water and Vinega Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential
3 4 omputation	Knoebel Haughton Mistretta Onal Biolog	Ruby Kyleigh Dominic y & Bioinfo	10 11 9 11 matic	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School Ct Caddo Parish Magnet High School	CH-57001 CH-57006 CH-57008 CH-57007 CB-58004	The Effect of Aqueous Organic Matter on BOD Lev The Decomposition of Plastics in Water and Vinego Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential Organ – The Kidney An Investigation of Intelligence from Demographic
3 4 omputatio	Knoebel Haughton Mistretta	Ruby Kyleigh Dominic y & Bioinfo	10 11 9 11 matic	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School	CH-57001 CH-57006 CH-57008 CH-57007	The Effect of Aqueous Organic Matter on BOD Lev The Decomposition of Plastics in Water and Vinege Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential Organ – The Kidney An Investigation of Intelligence from Demographic to Neural Networks
3 4 omputation 1	Knoebel Haughton Mistretta Onal Biolog Shah Veerareddy	Ruby Kyleigh Dominic Y & Bioinfor Aashni Anjali	10	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School Ct Caddo Parish Magnet High School Caddo Parish Magnet High School	CH-57001 CH-57006 CH-57008 CH-57007 CB-58004	The Effect of Aqueous Organic Matter on BOD Leventh The Decomposition of Plastics in Water and Vinego Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential Organ – The Kidney An Investigation of Intelligence from Demographic to Neural Networks Designing RNA Gene Circuits with Incoherent Type
3 4 omputation	Knoebel Haughton Mistretta Onal Biolog	Ruby Kyleigh Dominic y & Bioinfo	10 11 9 11 matic	St. Joseph's Academy Caddo Parish Magnet High School Glenbrook School Holy Cross School Ct Caddo Parish Magnet High School	CH-57001 CH-57006 CH-57008 CH-57007 CB-58004	The Effect of Aqueous Organic Matter on BOD Leventh The Decomposition of Plastics in Water and Vinego Electrolytes In Water VS Sports Drinks Common Beverages and their acidity How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential Organ – The Kidney An Investigation of Intelligence from Demographic



Earth & Envi	ronmental So	ciences				
			ПТ			Solute Movement in Surface Water with Different Stream and River
1	Chen	Emily	10	Baton Rouge Magnet High School	EA-59002	Geometries
						The Efficacy of a Biomimetic Design Derived from Stenocara gracilipes in
2	Desai	Ariun	10	Caddo Parish Magnet High School	EA-59010	Efforts Maximize Water Collection and Alleviate Concerns with the Global Water Crisis
2	Desai	Arjun	10	Caddo Parish Magnet High School	EA-39010	CHSIS
3	Pipsair	Grace	11	St. Joseph's Academy	EA-59001	Methane Uptake and Emissions by Soils and Sediments
		1		,		
4	Hoover	Madison	11	Patrick F. Taylor Science Technology Academy	EA-59008	The Hidden Risk of Residues of Insecticides in Honey
	Richard	Jonah	9	Holy Cross School	EA-59006	Behind Bars
	Davis	Jayden	11	Holy Cross School	EA-59004	Nitrogen Phosphorus Levels Found in Water Run-Off
	Brown	Ava Grace	9	Eunice High School	EA-59009	H2Ohhhhh
	Pedigo	Parker	9	Eunice High School	EA-59009	H2Ohhhhh
	Ledet lazard	Haylie laila	11 10	Terrebonne High School Opelousas Catholic School	EA-59005 EA-59007	Seed Germination vs. Acid Rain It's The Cabbage Patch
	Prudhomme	Courtney	9	Opelousas Catholic School	EA-59007	It's The Cabbage Patch
Honorable	Tradionine	courtiley	Ť	Operousus eatrione serioor	EA 33007	The effects of antacids and their impact on pH levels of waters affected by
Mention	Kaluturi	Jonathan	9	Alfred M. Barbe High School	EA-59003	textile pollution
Embedded S		Jonathan	1 -	Autrea in Barbe ingli ballooi	27133003	texture politicus.
	1	1	1 1		T	
1	Stentiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thormal Camera
2	Kizilkaya	Aliye	9	St. Joseph's Academy Baton Rouge Magnet High School	EB-60001	Detecting Hidden Security Threats with Thermal Camera Is it Ripe?
	Kiziikuyu	Allyc	+	baton nouge wagnet riigh school	EB 00002	is it ripe:
3	Hartman	Ava	11	Isidore Newman School	EB-60003	Rock My Run: Generating the Optimal Running Playlist
	ainable Mate			islant itemman sensor	25 00005	nook in y name denerating the optimal naming i laying
. 07	1	1	, T T		T	
	C d	Ni. de -	1.1	Datas Davis Massat III-b Cabaal	FC C4003	Alliali Matal Casasana Mitiratian in CO2 DD Customa
1	Syed	Nuha	11	Baton Rouge Magnet High School	ES-61002	Alkali Metal Crossover Mitigation in CO2 RR Systems
						An Accordible Experiment to Accord the Impact of the Change of Buildings and
2	Тао	Lee	12	Benjamin Franklin High School	ES-61003	An Accessible Experiment to Access the Impact of the Shapes of Buildings and Roofs on Wind Resistance
	140	Lee	12	Denjamin Frankii Filgri School	L3-01003	Noors on while nesistance
						The Effect of Material on the Absorbance, Stretch, and Amount of Water and
3	Fontenot	Presleigh	11	St. Joseph's Academy	ES-61001	Debris Let Through on a Silt Fence
-			1 1			
						Evaluating Acid and Alkaline Pretreatments of Sugarcane By-products to
4	Tewelde	Delina	11	Patrick F. Taylor Science Technology Academy	ES-61005	Optimize Biofuel Production
Honorable			1 1			
Mention	Moreau	Zane	10	NELCHA	ES-61004	Capturing the Sun
Engineering	Technology:	Statics & Dy	namic	cs control of the con		
	1	1	П		1	
1	Day	Josephine	12	Iberville Math Science and Arts Academy East	ENG-63001	3D Printed Bricks Based Off Mud Dauber Wasp Nest
			1 1			THE KEY TO CONFIDENTIALITY: Finding a Solution to Detrimental Key
2	Lopez	Allison	12	John Curtis Christian	ENG-63003	Duplication
3	Cascante	Miguel	9	Loyola College Preparatory School	ENG-63006	Motion Sensor
4	Benites	Omar	10	Captain Shreve High School	ENG-63007	One Room, One School, Endless Possibilities
4	Carter	Korde	11	Captain Shreve High School	ENG-63007	One Room, One School, Endless Possibilities
	Naquin	Bree	11	Cabrini High School	ENG-63005	The Heavy Lifter
nvironmen	tal Engineerii	ng				
1	Barker	Ella	11	St. Joseph's Academy	EE-64001	Combustion Carbon Capture Via Aqueous solution
2	Hubbell	Rosalyn	9	H. L. Bourgeois High School	EE-64004	Solar Powered Purification and Color
		<u> </u>	1 1	<u> </u>		Geotechnical Analysis and Comparison of Recycled Sediment for Coastal
3	Zhu	Louisa	11	Baton Rouge Magnet High School	EE-64002	Restoration
			T			
					1	Does the consistency of different types of soil affect the weight-bearing
4	Peters	Tricia	12	John Curtis Christian	EE-64005	capacity of small-scale, wooden piles?
4	Randall	Jack	11	Caddo Parish Magnet High School	EE-64006	Comparing the Efficiencies of Wind Turbine Designs
	Engel	Tracy	10	Hahnville High School	EE-64003	Water Filtration
Honorable						
Mention	Hafeez	Haania	11	Patrick F. Taylor Science Technology Academy	EE-64007	Catnip's effect on mosquitoes versus DEET



Materials Sci						
	lence	1			T T	
						Removing Lead(II) and Chromium(VI) lons From Water Using UV-C Light and A
1	Luo	Keanna	12	Baton Rouge Magnet High School	MS-65003	Immobilized TiO2 Photocatalyst
2	Schempf	Addy	11	St. Joseph's Academy	MS-65002	Nano-engineered Superwood for Resilient Foundation System
3	Guidry	Gunner	10	Holy Cross School	MS-65005	Braid, Monofilament, Fluorocarbon
Mathematics	<u> </u>					
1	Dao	Nhi	12	Caddo Parish Magnet High School	MA-66004	On Fractal Knots: Algorithmic Generation and Quantitative Analysis
2	Shin Ren	Heepeom	10 11	Baton Rouge Magnet High School	MA-66001	Mathematics in Complete Graphs
3	Wang	Sophia Andrew	11	Baton Rouge Magnet High School Baton Rouge Magnet High School	MA-66003 MA-66003	Mathematics in Tiling Mathematics in Tiling
Microbiology		Andrew	11	baton nouge wagnerings sensor	1417 00005	Watternates in Tilling
<u>.</u>		1	Т Т			
						Bordetella Bronchiseptica Blocks Eosinophil Trap Formation via a btrS-Associa
1	Miller	Gabrielle	12	Caddo Parish Magnet High School	MC-67005	Mechanism to Prevent Clearance of Infection
						Human Cytomegalovirus Upregulates Syntaxin 6 in Monocytes Through The
2	Klotzbach	Elizabeth	12	C.E. Byrd High School	MC-67006	Manipulation of Cell Signaling Pathways
						The Effect of Menthol, Methyl Salicylate, and Camphor on S. epidermidis and
3	Huynh	Summer	11	Patrick F. Taylor Science Technology Academy	MC-67008	M. luteus
4	Chafi	Amaaa	10	Paten Pouse Magnet III-b C-b1	MC 67000	Do Hopey Motals Affact Iron Hamasstosis in E. Call Bantarial Calls
4 Honorable	Shafi	Amaan	10	Baton Rouge Magnet High School	MC-67003	Do Heavy Metals Affect Iron Homeostasis in E. Coli Bacterial Cells? Symbiotic Effects of P. australis, L. edodes, and Penicillin on E. coli and S,
Mention	Tullier	Caroline	11	St. Joseph's Academy	MC-67002	epidermidis
Physics & Ast		Caroline	11	St. Joseph 3 Academy	IVIC-07002	epidermidis
,	1	1	ТТ		1	
1	Buffone	Juliette	11	St. Joseph's Academy	PH-68001	The Effects of Sound-proofing Insulations on a Metal Roof
1	bullone	Juliette	11	St. Joseph 3 Academy	F11-08001	The Effects of Southe-proofing insulations of a Metal Roof
2	Baldassaro	Gage	11	Holy Cross School	PH-68006	What are the most optimal measurements for a medium sized trebuchet?
			17	,	1	Stonehenge in Hand: Reconstructing Prehistoric Calendars from the Lozenge
3	Jiang	lvy	11	Episcopal School of Baton Rouge	PH-68002	Unit of Length
4	Messina	Felecity	11	H. L. Bourgeois High School	PH-68004	How fast is fast?
4	Pellegrin	Brea	11	H. L. Bourgeois High School	PH-68004	How fast is fast?
Honorable						
Mention Plant Science	Wrightson	Micalee	10	Caddo Parish Magnet High School	PH-68003	Superconducting The Future!
Plant Science	-	1			Ţ	
						Year VII: Determining the Factors that Increase Red Bean Germination to Help
1	Sam-Pang	Michael	12	John Curtis Christian	PS-69005	Feed the World
2	Vuraahka	Alexa	10	Coddo Darich Magnet High School	PS-69007	Can Algan be used as a equiranmentally friendly bettern?
2	Yurochko	Alexa	10	Caddo Parish Magnet High School	P3-69007	Can Algae be used as a environmentally friendly battery?
3	Stockstill	Kate	11	St. Joseph's Academy	PS-69002	The Effects of Carbon Dioxide on Brassica Rapa Plants
		1		,	100000	Is the Aqueroponics system as efficient as a traditional Nelson-Pade Aquapon
4	Diez	David	9	Baton Rouge Magnet High School	PS-69003	system?
Honorable						
Mention						
	Saikolappan	Sivamayuri	9	Caddo Parish Magnet High School	PS-69004	How Are Plants Able to React to Stimulus?
Robotics & In			9	Caddo Parish Magnet High School	PS-69004	How Are Plants Able to React to Stimulus?
Robotics & Ir			9	Caddo Parish Magnet High School	PS-69004	How Are Plants Able to React to Stimulus?
Robotics & Ir			9	Caddo Parish Magnet High School	PS-69004	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Marg
Robotics & In			9 11	Caddo Parish Magnet High School Caddo Parish Magnet High School	PS-69004 RO-70006	
	ntelligent Ma	chines				Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Marg
	ntelligent Ma	chines				Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network
1	Chen	Sophie	11	Caddo Parish Magnet High School	RO-70006	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence
1	Chen Trutschl	Sophie Maya	11	Caddo Parish Magnet High School Caddo Parish Magnet High School	RO-70006	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index
1	Chen	Sophie	11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School	RO-70006	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird
1 2 3	Chen Trutschl Smith	Sophie Maya Kaitlyn	11 9 10	Caddo Parish Magnet High School Caddo Parish Magnet High School	RO-70006 RO-70004 RO-70002	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index
1 2 3 4 4	Chen Trutschl Smith Fontenot Grace	Sophie Maya Kaitlyn Aaron	9 10 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligent to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot
1 2 3 4 4	Chen Trutschl Smith Fontenot Grace	Sophie Maya Kaitlyn Aaron	9 10 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligent to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot
1 2 3 4 4	Chen Trutschl Smith Fontenot Grace	Sophie Maya Kaitlyn Aaron	9 10 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligent to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot
1 2 3 4 4	Chen Trutschl Smith Fontenot Grace	Sophie Maya Kaitlyn Aaron	9 10 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligent to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot
2 3 4 4 5ystems Soft	Chen Trutschl Smith Fontenot Grace Ware	Sophie Maya Kaitlyn Aaron Anna	9 10 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fal
2 3 4 4 5ystems Soft	Chen Trutschl Smith Fontenot Grace Ware	Sophie Maya Kaitlyn Aaron Anna	9 10 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School	RO-70006 RO-70004 RO-70002 RO-70005 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fal
1 2 3 4 4 4 55ystems Soft	Chen Trutschl Smith Fontenot Grace Ware Wei Tamidela	Sophie Maya Kaitlyn Aaron Anna William Srija	9 10 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School Baton Rouge Magnet High School Patrick F. Taylor Science Technology Academy	RO-70006 RO-70004 RO-70002 RO-70005 S5-71002	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fal News Detection on Twitter: A Bayesian Framework Measuring the Correlation Between Website Accessibility and Interactivity
2 3 4 4 Systems Softs	Chen Trutschl Smith Fontenot Grace Ware	Sophie Maya Kaitlyn Aaron Anna William	9 10 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School Baton Rouge Magnet High School	RO-70006 RO-70004 RO-70002 RO-70005 RO-70005	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fal News Detection on Twitter: A Bayesian Framework Measuring the Correlation Between Website Accessibility and Interactivity
2 3 4 4 5ystems Soft	Chen Trutschl Smith Grace Ware Wei Tamidela LaBauve	Sophie Maya Kaitlyn Aaron Anna William Srija Callista	11 9 10 11 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School Baton Rouge Magnet High School Patrick F. Taylor Science Technology Academy St. Joseph's Academy	RO-70006 RO-70004 RO-70002 RO-70005 RO-70005 SS-71002 SS-71004	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fal News Detection on Twitter: A Bayesian Framework Measuring the Correlation Between Website Accessibility and Interactivity The Benefits of Virtual Reality as a Substitute for School Science Laboratories
2 3 4 4 5 Systems Soft	Chen Trutschl Smith Fontenot Grace Ware Wei Tamidela	Sophie Maya Kaitlyn Aaron Anna William Srija	9 10 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School Baton Rouge Magnet High School Patrick F. Taylor Science Technology Academy	RO-70006 RO-70004 RO-70002 RO-70005 S5-71002	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fall News Detection on Twitter: A Bayesian Framework Measuring the Correlation Between Website Accessibility and Interactivity
1 2 3 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chen Trutschl Smith Fontenot Grace Ware Wei Tamidela LaBauve Bergeron	Sophie Maya Kaitlyn Aaron Anna William Srija Callista Emily	11 9 10 11 11 11 11	Caddo Parish Magnet High School Caddo Parish Magnet High School Baton Rouge Magnet High School LaGrange High School LaGrange High School Baton Rouge Magnet High School Patrick F. Taylor Science Technology Academy St. Joseph's Academy Kenner Discovery Health Sciences Academy	RO-70006 RO-70004 RO-70002 RO-70005 RO-70005 SS-71002 SS-71004 SS-71001	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margusing a Convolutional Neural Network Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelligence to Accurately Classify Monocytes and Calculate the Monocyte Index Reinforcement Learning in Flappy Bird Improving the Clawbot Improving the Clawbot Building a Credit Assessment Model from Learned User Behavior to Assist Fall News Detection on Twitter: A Bayesian Framework Measuring the Correlation Between Website Accessibility and Interactivity The Benefits of Virtual Reality as a Substitute for School Science Laboratories Mobile App That Accurately Calculates Insulin Dosages
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	Fontenot	Presleigh	11	St. Joseph's Academy	ES-61001	The Effect of Material on the Absorbance, Stretch, and Amount of Water Debris Let Through on a Silt Fence
uisiana Se	Barker ection of the Ai	r & Waste I	11 Mana	St. Joseph's Academy gement Association Special Award	EE-64001	Combustion Carbon Capture Via Aqueous solution
	T	ı	1 1			
	Yurochko	Alexa	10	Caddo Parish Magnet High School	PS-69007	Can Algae be used as a environmentally friendly battery?
		n !!			50.04005	Evaluating Acid and Alkaline Pretreatments of Sugarcane By-products to
	Tewelde Barker	Delina Ella	11	Patrick F. Taylor Science Technology Academy St. Joseph's Academy	ES-61005 EE-64001	Optimize Biofuel Production Combustion Carbon Capture Via Aqueous solut
uisiana St	ate Horticultui	ral Society S	pecia			
	1		ТТ			Year VII: Determining the Factors that Increase Red Bean Germination to
	Sam-Pang	Michael	12	John Curtis Christian	PS-69005	Feed the World
	Kallar	la salum	11	St. Joseph's Academy	ANI E1003	The Effect of Pollen Taste on Visitation Rates of the Apis Mellifera
rospace N	Keller Vledical Associa	Jacelyn ation Specia		St. Joseph's Academy	AN-51002	The Lifect of Folien raste on visitation rates of the Apis Weilinera
•	T		т т			
						How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to
1st Place	Shah	Aashni	10	Caddo Parish Magnet High School	CB-58004	Bioengineer an Essential Organ – The Kidney
	l	_				PRESERVING AQUATIC LIFE FROM THE HARMFUL EFFECTS OF OCEAN
1st Place	Chiruguru	Susanna	10	LaGrange High School	CH-57003	ACIDIFICATION
1st Place	Mayeux	Zaira	10	St. Joseph's Academy	CH-57001	The Effect of Aqueous Organic Matter on BOD Levels
2nd Place	Alwood	Sela	10	St. Joseph's Academy	BM-54001	Comparing Manual and Mechanical Heads-Up Cardiopulmonary Resuscit
2nd Place	Moe	Margaret	12	St. Joseph's Academy	BE-55002	Generation of 3D Co-Cultured Breast Cancer Spheroids to Study the Spa Distribution of Fibroblast-Produced Collagen
	L					Single Cell Analysis of Deubiquitinating Enzyme (DUB) Activity in a Micro
2nd Place	Devireddy	Veda	11	Baton Rouge Magnet High School	CE-56002	Droplet Trapping Array
2nd Place	Yang	Alexander	9	Baton Rouge Magnet High School	CE-56001	How a S. aureus Protein Manipulates Human Leukocytes
						Reducing Risks of Transfusion Hemolytic Reactions: Using Artificial Intelli
2nd Place	Trutschl	Maya	9	Caddo Parish Magnet High School	RO-70004	to Accurately Classify Monocytes and Calculate the Monocyte Index
2nd Place	Zaman	Ahan	10	Baton Rouge Magnet High School	CB-58001	Designing RNA Gene Circuits with Incoherent Type-1 Feed-forward Loop
2nd Place	Shafi	Amaan	10	Baton Rouge Magnet High School	MC-67003	Do Heavy Metals Affect Iron Homeostasis in E. Coli Bacterial Cells?
						Symbiotic Effects of P. australis, L. edodes, and Penicillin on E. coli and S,
2nd Place	Tullier	Caroline	11	St. Joseph's Academy	MC-67002	epidermidis
2nd Place	Primeaux	Jolie	11	St. Joseph's Academy	TM-72001	The Effects of Alcohol on Taste Receptor Expression and Fungiform Papil Density
Zilu Flace	Fillieaux	Jolle	11	St. Joseph's Academy	1101-72001	Using Artificial Fixation Points to Increase the Reading Speed of Sele
2nd Place		Keya	10	Baton Rouge Magnet High School	BEH-52002	Populations
merican Ps	sychological As	sociation S	pecial	l Awarc		
						A Machine Learning Approach for Detecting Depression among Colleg
sociation	Yu for Women Ge	Peter Oscientists	Speci	Louisiana School for Math Science the Arts	BEH-52003	Students
	1	1	7,000			
	Barker	Ella	11	St. Joseph's Academy	EE-64001	Combustion Carbon Capture Via Aqueous solution
ASA Earth	System Science					·
			T			
	Day	Josephine	12	Iberville Math Science and Arts Academy East	ENG-63001	3D Printed Bricks Based Off Mud Dauber Wasp Nest
ational Ge	ographic Socie	ty Special A	ward			
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ational Oc	Stentiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thermal Camera
ational UC	earne and Atm	ospilent At	411111111	Suadon Awart		PRESERVING AQUATIC LIFE FROM THE HARMFUL EFFECTS OF OCEAN



Office of N	Naval Research	(ONR) Speci	al Awa	ard		1
		, -p-ee.	1		1	
	Stentiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thermal Camera
	Simmons	Merrin	11	John Curtis Christian	CH-57005	Can Cleaning Agents Inhibit the Detection Ability of Luminol
	Manikandan	Shrivats	9	Caddo Parish Magnet High School	BEH-52004	The Effects of Methamphetamine on Brain Microvascular Endothelial Cell Structure and Function in the Blood Brain Barrier
Regenero	n Biomedical Sc	ience Awar	d			
	Shah	Aashni	10	Caddo Parish Magnet High School	CB-58004	How Human Induced Pluripotent Stem Cells (hIPSCs) Can Be Used to Bioengineer an Essential Organ – The Kidney
Ricoh, USA	A, Inc. Special A	ward				
	Luo	Keanna	12	Baton Rouge Magnet High School	MS-65003	Removing Lead(II) and Chromium(VI) Ions From Water Using UV-C Light and A Immobilized TiO2 Photocatalyst
Society fo	r In Vitro Biolog	y Special Av	ward			
	Devireddy	Veda	11	Baton Rouge Magnet High School	CE-56002	Single Cell Analysis of Deubiquitinating Enzyme (DUB) Activity in a Microfluidic Droplet Trapping Array
U.S. Agen	cy for Internation	nal Develo	pment	(USAID)	•	
	Stentiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thermal Camera
U.S. Metri	ic Association Sp	pecial Awar	d			
	Jiang	lvy	11	Episcopal School of Baton Rouge	PH-68002	Stonehenge in Hand: Reconstructing Prehistoric Calendars from the Lozen _l Unit of Length
U.S Stocki	holm Junior Wa	ter Prize				
	Mayeux	Zaira	10	St. Joseph's Academy	CH-57001	The Effect of Aqueous Organic Matter on BOD Levels
United Sta	ates Air Force Sp	pecial Awar	d			
	Chen LeBoeuf	Sophie Cody	11	Caddo Parish Magnet High School South Terrebonne High School	RO-70006 CH-57004	Intraoperative Histological Analysis of Squamous Cell Carcinoma Tumor Margn using a Convolutional Neural Network Rocket Ready Go!
Yale Scien	ice & Engineerin	g Association	on Spe	cial Award		
	Veerareddy	Anjali	11	Caddo Parish Magnet High School	CB-58005	An Investigation of Intelligence from Demographics to Neural Networks



		7		EF) Nominees		
Sir	mmons	Merrin	11	John Curtis Christian	CH-57005	Can Cleaning Agents Inhibit the Detection Ability of Luminol
Ste	entiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thermal Camera
Da	ау	Josephine	12	Iberville Math Science and Arts Academy East	ENG-63001	3D Printed Bricks Based Off Mud Dauber Wasp Nest
Le	tchuman	Raj	12	Caddo Parish Magnet High School	BM-54009	CaSR-GSH Interaction: Finding an Effective Antagonist
Ва	arker	Ella	11	St. Joseph's Academy	EE-64001	Combustion Carbon Capture Via Aqueous solution
St.	. Amant	Riley	11	St. Joseph's Academy	AN-51001	The Prevalence of Ophryocystis elektroscirrha Infection in the South Louisiana Danaus plexippus Population
ce Overa	ill					
	mmons	Merrin	11	John Curtis Christian	CH-57005	Can Cleaning Agents Inhibit the Detection Ability of Luminol
ace Overa	all					
Ste	entiford	Kenzie	10	St. Joseph's Academy	EB-60001	Detecting Hidden Security Threats with Thermal Camera
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