

# Greater New Orleans Science Fair, Inc. Region IX of Louisiana May 2022

## A YEAR IN REVIEW



*2022 Greater New Orleans Science and Engineering Fair  
was Virtual!*

- GNOSEF (Regional Fair)
- ISEF (International Fair)
- Financial Report
- GNOSEF Wish List
- Board Business
- GNOSEF Strengths
- Calendar for 2022-23

Annette Oertling Ph.D., Fair Director  
Michelle Sanchez Ph.D., Fair Director

# Greater New Orleans Science Fair, Inc.

## Mission Statement

- **provide a public event** to display and recognize area students' research – the Greater New Orleans Science and Engineering Fair
- **encourage independent student research** in science and engineering,
- **promote the understanding and appreciation of sciences,**
- **encourage youth** to pursue science, math, or engineering careers,
- **stimulate interest and support** for science and math programs in area schools,
- **promote collaboration** and interaction between area students and scientists and engineers from the community and/or the world.

# 2021-22 GNOSEF Board of Directors

	First Name	Last Name	Board Involvement	Affiliation
1	Harriet	Aguiar-Netto	Programs-VolCoord	Women for a Better Louisiana
2	Nick	Altiero	President-StratPlanning	Tulane University - retired
3	Asha	Buehler	Programs-SpAwardJdgCoord	Tulane University
4	Harry	Clark	Programs	Jesuit High School - retired
5	Laurence	de Quay		John C. Stennis Space Center/NASA
6	Scott	Edwards	Programs	LSUHSC
7	Nancy	Hopkins	Programs-Judge Advisor	Tulane University - retired
8	Barbara	LaNasa	Programs	Women for a Better Louisiana
9	Lorraine	McGinley	Treasurer-Programs	Tulane University - retired
10	Annette	Oertling	Fair Director	Tulane University - retired
11	Barbara	Paillet	Strategic Planning	Bruce J. Heim Foundation
12	Arman	Sadeghpour	Strategic Planning	Tulane University, Theodent
13	Michelle	Sanchez	Fair Director	Tulane University
14	Britton	Sanderford	Strategic Planning	Axon Corp., UNO Foundation
15	Danielle	Scanlon	Programs	Tulane University
16	Janell	Simpson	Programs-SRC Member	Patrick F Taylor School - retired
17	Cathie	Smith	Programs-SafetyJdgCoord	GNO STEM Initiative, Jefferson Parish Public Schools - retired
18	Erica	Smith	Programs-Judge Coordinator	Tulane University
19	Andrea	Walker	Programs-SRC Chair	The GNO STEM Initiative - retired

# 2021-22 GNOSEF Advisory Council

	First Name	Last Name	Affiliation
1	Roberto	Diaz del Valle	Tulane University
2	Norma Jean	Mattei	University of New Orleans
3	Steve	Johnson	University of New Orleans
4	Kim	Jovanovich	University of New Orleans



## Thank You to Our 2022 Sponsors!

*\* Gold Sponsorship (\$7,500- \$14,999) \**

### **H. Britton Sanderford (2012-2022)**

Mr. H. Britton Sanderford also provides the James de la Houssaye Mentor Awards recognizing high school mentor(s) for their educational and inspirational work with students, and a Neuroscience / Machine Learnings Scholarship for excellent work by a student researcher.

### **Entergy Corporation (2017-2022)**



Entergy Corporation also provides a \$1,000 Powering the Future Scholarship to a female, high-school senior with an outstanding, promising project.

### **Patrick F. Taylor Foundation (2007-2022)**



The Patrick F Taylor Foundation also provides a \$1,000 Scholarship to each of the top four Senior Division winners and \$10,000 in materials and/or field trip grants for participating high schools which have a minimum of 10 projects competing in the senior division.

### **Paul and Patty Habeeb Muehlemann 5-Year Sustainability Sponsorship (2018-2022)**

In memory of Dorothy Van Lue Habeeb, founding member of the Greater New Orleans Science Fair, Inc., and in honor of Albert F.W. Habeeb M.D.

Mrs. Patty Muehlemann also provides a Dorothy Van Lue Habeeb \$1,000 Scholarship (Sr. Division) and \$50 award (Jr. Division) for an outstanding project focused on the study of Chemistry or the use of Chemistry as a tool in scientific inquiry or engineering design, and an Albert F.W. Habeeb M.D. \$1,000 Scholarship (Sr. Division) and \$50 award (Jr. Division) for an outstanding project related to Health Sciences.

*\* Silver Sponsorship (\$3,000-\$7,499) \**

**BW<sup>2</sup> (2019-2022)**

Individual Sponsor

**The Bruce J. Heim Foundation (2010-2022)**

The Bruce J. Heim Foundation also provides a cash award to a Senior Division student their sponsoring teacher to recognize an Outstanding Medical Research Project.

*\* Bronze Sponsorship (\$1,000-\$2,499) \**

**American Petroleum Institute-Delta Chapter (2012-2022)**



The American Petroleum Institute – Delta Chapter also provides 1st, 2nd, and 3rd place cash awards to Senior Division students and teachers for outstanding projects related to energy.

**The Joe W. and Dorothy Dorsett Brown Foundation (2019-2022)**



The Joe W. and Dorothy Dorsett Brown Foundation also provides the "Aspiring Researcher" Scholarship – a \$2,500 undergraduate scholarship awarded to a high school female that demonstrates passion and promise for scientific research presented by the Emmy Noether Awards.

**Society of Petroleum Engineers (2012-2022)**



The Society of Petroleum Engineers also provides 1st and 2nd place cash awards to Junior Division students and teachers for outstanding projects related to the Oil Industry.

**National Association of Corrosion Engineers (2008-2022)**



The New Orleans Section of NACE International also provides 1st and 2nd place cash awards to Jr and Sr Division students and teachers for projects demonstrating the best understanding of corrosion. They also work with ASM International to provide an all-expense-paid trip to a one-week summer materials camp for the most outstanding 10th or 11th grade high school project in materials engineering science.

***\* Blue Ribbon Sponsor (\$500-\$999) \****

**American Society of Civil Engineers – New Orleans Branch (Local) (2018-2022)**

The American Society of Civil Engineers also provides a cash award to a student and his/her sponsoring teacher to recognize an Outstanding Civil Engineering project.

***\* Red Ribbon Sponsor (\$250-\$499) \****

**Dr. Harriet Aguiar-Netto (2010-2022)**

Individual Sponsor

***\* Yellow Ribbon Sponsor (\$100-\$299) \****

**Dr. Annette Oertling (2022)**

Individual Sponsor

***\* Honorable Mention (Up to \$99) \****

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**American Welding Society: N.O. Section (2008-2022)**

The American Welding Society – New Orleans Section also provides a cash award to a Junior and Senior Division student for the best project in the Welding or Materials Joining field.

**Norma Jean Mattei**

Individual Sponsor

**Justine Aguiar and Craig Ball**

Individual Sponsor donations through GiveNOLA 2021

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***\* Community Supporters \****

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**Tulane University**

**Loyola University**

**Women for a Better Louisiana**

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# Greater New Orleans Science and Engineering Fair

February 14<sup>th</sup> – 19<sup>th</sup>, 2022

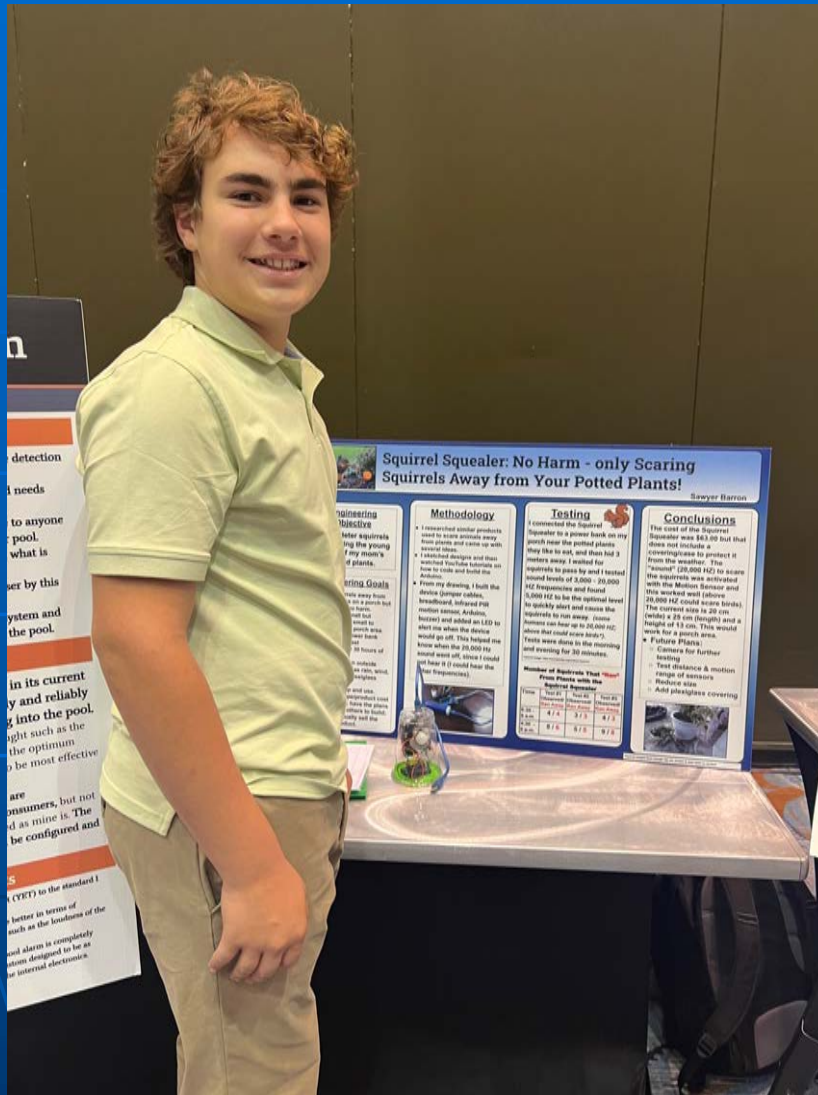
## In launching our live, virtual fair this year we had...

- 198** 10-minute live interviews
- 182** middle and high school students
- 165** science and engineering fair projects
- 128** category winners
- 84** unique category judges (some judged multiple categories)
- 60** projects participating in the LA Science and Engineering Fair
- 30** categories
- 27** Zoom sessions
- 25** local organizations providing student and teacher awards
- 22** dedicated teachers
- 22** national organizations providing student awards
- 13** GNOSEF sponsors
- 12** local schools
- 11** graduate student mentors
- 10** Tulane undergraduate volunteers
- 9** Grand Award judges
- 9** devoted GNOSEF coordinators
- 8** safety and display judges
- 8** Grand Award winners
- 4** projects participating in the International Science and Engineering Fair!
- 1** AMAZING Virtual GNOSEF!



# Greater New Orleans Science and Engineering Fair

## February 14<sup>th</sup> – 19<sup>th</sup>, 2022



Sawyer Barron (at the Tulane Engineering Forum)

### Junior Division

(5 participated)

Alice Harte Charter School

Holy Cross School \*

International School of Louisiana – Camp

John Curtis Christian \*

Lake Forest Elementary Charter School

(\* both Jr. and Sr. Division)

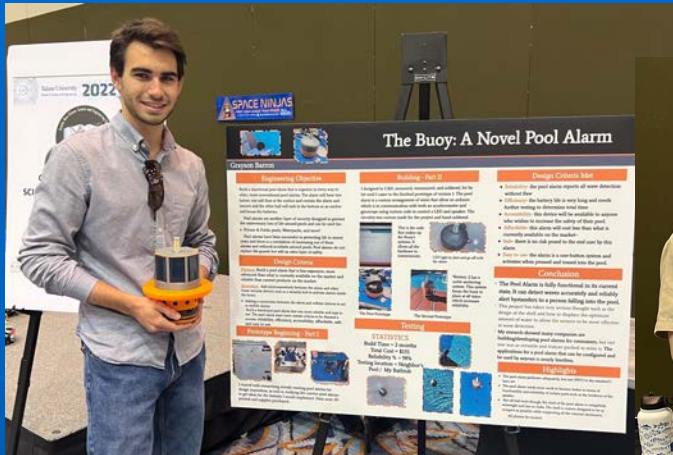
### Jr. Division Grand Award Winners

**Sawyer Barron – John Curtis Christian**  
**Jamal Beverly – Lake Forest Elementary**  
**Charter School**  
**Rylee McField – Lake Forest Elementary**  
**Charter School**

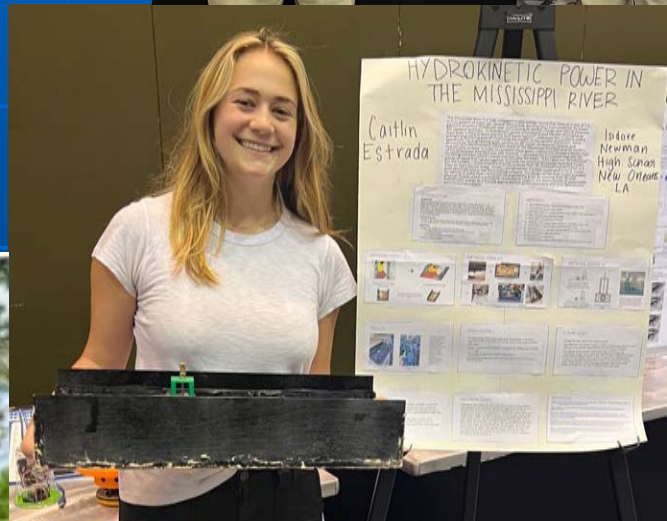
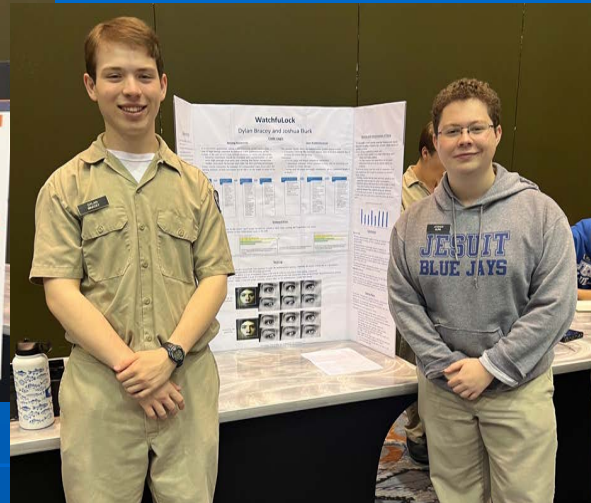


# Greater New Orleans Science and Engineering Fair

## February 14<sup>th</sup> – 19<sup>th</sup>, 2022



Grayson (left above), Brett and Joshua (right above), Caitlin (right) and Rachel (below)



### Senior Division

(9 participated)

Benjamin Franklin High School  
eLearning Academy of New Orleans, LLC  
Holy Cross School \*  
Isidore Newman High School  
Jesuit High School  
John Curtis Christian \*  
Kenner Discovery Health Sci. Academy  
Patrick F. Taylor Science & Tech. Academy  
Sci High

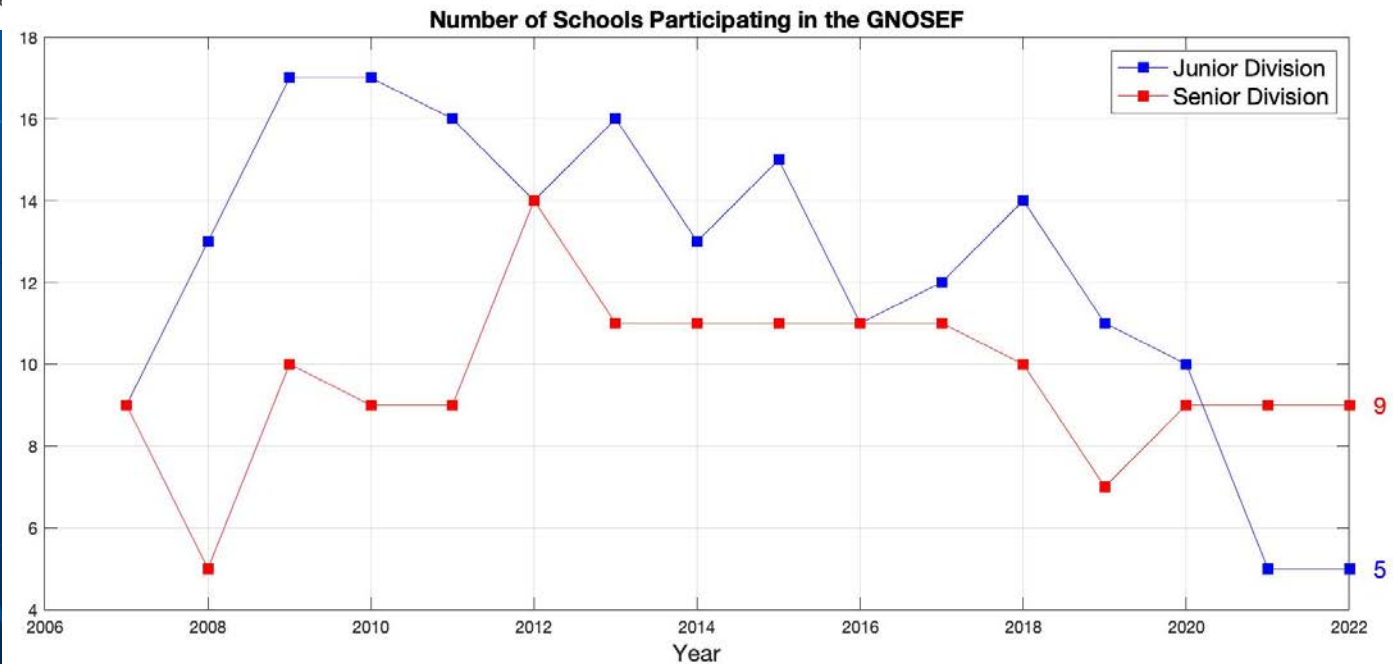
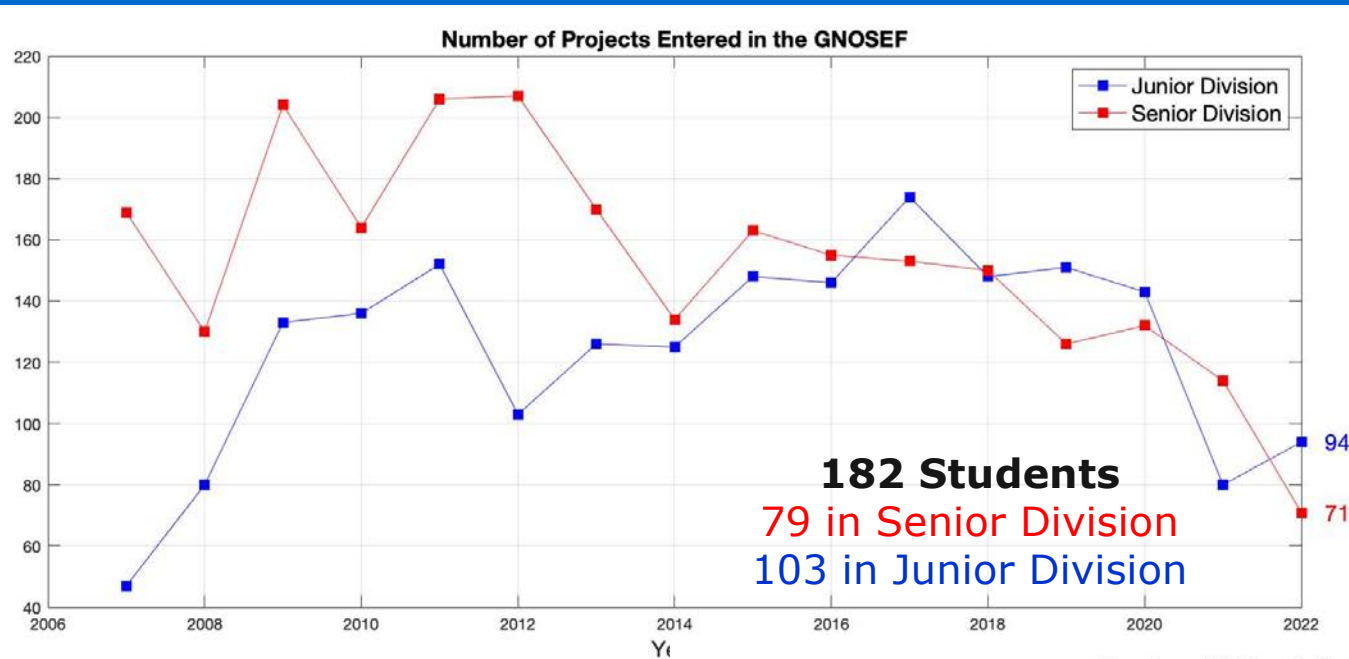
(\* both Jr. and Sr. Division)

### Sr. Division Grand Award Winners

Grayson Barron – John Curtis Christian  
Dylan Bracey and Joshua Burk– Jesuit High School  
Caitlin Estrada – Isidore Newman School  
Rachel Pizzolato – eLearning Academy of New Orleans

# Participation in GNOSEF since 2007

(Limited by Number of Projects Per Category a School can Submit)



# 2022 GNOSEF AWARDS

Through the generosity of our donors, more than \$60,000 in awards and prizes were presented to talented students, teachers and schools!!!

Category awards were presented in  
16 Senior Division  
And 14 Junior Division  
categories.

	<u>Junior Division</u>	<u>Senior Division</u>
1. First Place	\$50 and medal	\$75 and medal
2. Second Place	\$30 and medal	\$50 and medal
3. Third Place	\$15 and medal	\$25 and medal
4. Honorable Mention	\$10	\$15

1<sup>ST</sup> and 2<sup>nd</sup> place winners in both the junior and senior divisions were certified for entry in the **2022 Louisiana Science and Engineering Fair (LSEF)** conducted virtually through LSU this year!

# James de la Houssaye Mentor Award

(Senior Division)

*sponsored by Mr. H. Britton Sanderford*

*(established 2015)*

## OBJECTIVE

Recognize a high school mentor for their educational and inspirational work with students pursuing STEM inquiry.

## 2022 AWARDS

- Due to quality of student nominations, two 1<sup>st</sup> place awards were given:  
\$1000 each



### Recipients:

- **Ms. Cathy Boucvalt (left),**  
John Curtis Christian
- **Mrs. Cheryl Bordelon (right),**  
Patrick F. Taylor Science &  
Technology Academy





# Patrick F. Taylor Foundation Awards

(Senior Division)

*(established 2008)*

## OBJECTIVE

Provide incentive to increase student interest, enrollment, and performance in upper level math and science courses through participation in the GNOSEF.

## 2022 AWARDS

- \$10,000 materials and field trip grant divided among eligible high schools.
  - \$2,500 grants to four school winners in the senior division

### 2022 School Grant Recipients

Holy Cross School

Isidore Newman High School

John Curtis Christian

Patrick F. Taylor Science and Technology Academy

# The “Aspiring Researcher” Scholarship presented by the Emmy Noether Awards

(Senior Division)

*(established 2019)*

A \$2,500 undergraduate scholarship is awarded to a female high school student that demonstrates passion and promise for scientific research. Funding is provided by the Joe W. and Dorothy Dorsett Brown Foundation. The scholarship is presented upon receipt of an acceptance letter into a college of their choice.

**Recipient: Staicy Triminio-Fererra, Sci High**





# Neuroscience/Machine Learnings Scholarship

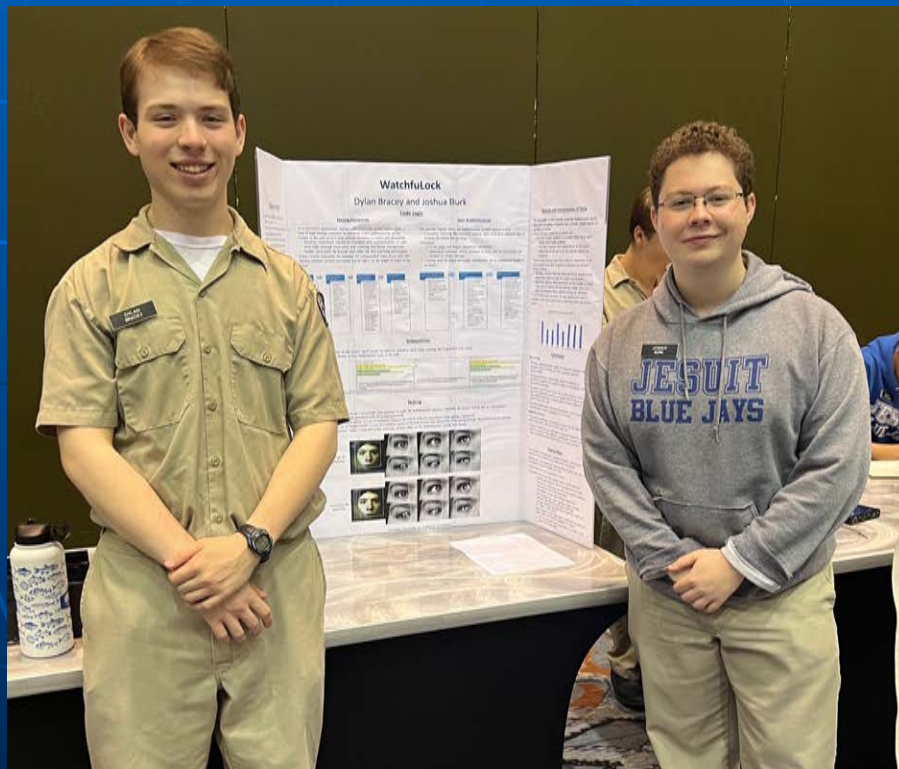
(Senior Division)

*sponsored by Mr. H. Britton Sanderford*

*(established 2015)*

Recognizes excellent work in the field of neuroscience, the study of the nervous system, and the field of machine learnings, a subfield of computer science and artificial intelligence that deals with the construction and study of systems that can learn from data, rather than follow only programmed instructions.

**\$500 college scholarship** was presented to each winner of the team project upon presentation of an acceptance letter into a college of their choice.



Recipients:  
**Dylan Bracey and Joshua Burk,**  
**Jesuit High School**

# Tulane Science Scholars Program Scholarship

*sponsored by Tulane School of Science and Engineering*

*with support from the Bruce J. Heim Foundation (established 2015)*

Recognizes an exceptional project by a 10th or 11th grade student in an area of science or engineering. The TSSP is a selective program for rising juniors or seniors who have exceptional talent in the sciences, engineering, and mathematics.

**\$1995 scholarship** for a virtual summer for-credit course. This year the judges were so impressed with a second student's project, that a runner up will also receive a **full scholarship worth \$1995.**



## Recipients

**Lauren Ejiaga (left),**  
Benjamin Franklin High School

(runner-up)  
**Staicy Triminio-Fererra (right),**  
Sci High

# Entergy Corporation “Powering the Future” Scholarship Award



(Senior Division)

*(established 2017)*

**\$1000 college scholarship** to be awarded to a female, high school senior with an outstanding, promising project, upon presentation of their acceptance letter into a college or university.

**Recipient: Allie Johnson, Patrick F. Taylor Science & Technology Academy**



# Albert F.W. Habeeb, M.D. Scholarship Award

(Senior Division)

*(established 2018)*

In honor of Albert F.W. Habeeb, M.D., a **\$1000 scholarship** is presented to a Senior Division student for an outstanding project focused on health sciences to be presented upon acceptance into a University.

**Recipient: Lizzie Robert, Isidore Newman School**



# Dorothy Van Lue Habeeb Scholarship Award

(Senior Division)

*(established 2018)*

In memory of Dorothy Van Lue Habeeb, founding member of the GNOSEF, Inc., a **\$1000 scholarship** is awarded to a Senior Division student for an outstanding project focused on chemistry or the use of chemistry as a tool in scientific inquiry or engineering design to be presented upon acceptance into a University.

**Recipients: Allison Lopez, John Curtis Christian**

# SOCIETY FOR SCIENCE 2022 COMMUNITY INNOVATION AWARD

(Senior Division)

The Society for Science is proud to offer an award to high school students at **34 science fairs around the world** who seek to help mankind through science and engineering. The \$500 special award was provided to a student or team who has done a project that will better humanity and improve conditions in the local community. This year's winner was a team project and will split the award money.

**Recipients: Allie Johnson, Patrick F. Tavlör Science & Technology Academy**





# GNOSEF Teacher/Mentor Awards

(Junior Division)

Presented to teacher/mentors who have gone the extra mile to coordinate many students' successful competition in the GNOSEF

- \$250 Cash Award to FOUR teachers!



Marla and Sharika



Carol (top) and  
Karen (left)

**Carol Franze**  
LSU Ag Center

**Sharika Hagan**  
Lake Forest Elementary  
Charter School

**Karen Marshall**  
International School of LA -  
Camp

**Marla Watts**  
Lake Forest Elementary  
Charter School

# GNOSEF STAR TEACHER AWARDS

(Both Divisions)

*(established 2021)*

Sponsored by an anonymous donor, BW<sup>2</sup>, this NEW award is presented to teachers who strove to participate in the GNOSEF by going above and beyond making sure to follow ISEF's rules and learn GNOSEF guidelines. Each recipient received \$250!



Katherine and Tara

Theresa



**Junior Division:**  
**Theresa Cross**  
Alice Harte Charter School

**Tara Lavender**  
Holy Cross School

**Senior Division:**  
**Victoria Mercouris**  
Isidore Newman School

**Dr. Katherine Schilling**  
Holy Cross School



Victoria

# Additional Local Special Awards

**AIAA Greater New Orleans Section**

**American Institute of Chemical Engineers – N. O. Section**

**American Society of Civil Engineers – N.O. Branch**

**American Welding Society – New Orleans Section**

**Biophysics Award (Biophysical Society)**

**Bruce J. Heim Foundation**

**Community Leader, Presented by Ochsner Health**

**Greater New Orleans STEM**

**MENSA - (The High IQ Society), N.O. Chapter**

**M.S. Benbow & Associates**

**New Orleans Geological Society**

**New Orleans Section of NACE International “The Corrosion Society”**

**Society of American Military Engineers (SAME)**

**Structural Engr. Institute of the Am. Soc. of Civil Engin.-N.O. Branch**

**U.S. Department of Agriculture - Agricultural Research Service**

**Women for a Better Louisiana**



# Additional National Special Awards

**American Meteorological Society**  
**American Psychological Association (APA)**  
**ASM Materials Education Foundation**  
**Association for Women Geoscientists Foundation**  
**Broadcom MASTERS**  
**Department of Defense (DoD) STEM Leadership Prize**  
**Lemelson Early Inventor Prize**  
**Mu Alpha Theta**  
**NASA EARTH System Science Award**  
**National Geographic – *That's Geography!* Award**  
**National Oceanic and Atmospheric Administration (NOAA)**  
**Ricoh Americas Corporation**  
**Society for Industrial Microbiology and Biotechnology**  
**Stockholm Junior Water Prize**  
**U.S. Agency for International Development (USAID)**  
**U.S. Air Force**  
**U.S. Metric Association**  
**U.S. Navy/U.S. Marine Corps – Office of Naval Research**  
**Yale Science & Engineering Association, Inc.**

# 2021-2022 GNOSEF Mini-Grants

Through the generosity of H. Britton Sanderford and a partnership with the **STEM Library Lab (SLL)**, **7 materials and equipment requests** (15 in 2020-2021) **totaling \$1,641.71** (\$2,231.10 in 2020-2021) were provided to students at:

**Holy Cross School  
International School of Louisiana  
Isidore Newman School  
John Curtis Christian**

**Partnership with SLL – \$2000 annual cost**

**2022: \$1,309.18 in equipment expenses and \$332.53 for consumables**

**Hurricane Ida is one reason that this number decreased from last year**

The objective was to provide equipment and consumables for worthy student projects that would otherwise not have the resources to participate. Partnering with SLL allows equipment to be reused by future science fair participants as well as the schools they partner with.

**To qualify for a materials and equipment request, students must:** Submit ISEF forms that show they conform to the ISEF guidelines and submit an estimate of expenses incurred by SLL.

**ALL AFFILIATED SCHOOLS ARE ELLIGIBLE AND NOTIFIED!**

# GNOSEF Student Successes

## 2022 LA State Science and Engineering Fair (LSEF)

### SENIOR DIVISION CATEGORY AWARDS (20 projects!!!) – Page 1

Place	Category	Student	School
3 <sup>rd</sup>	<u>Animal Sciences</u>	Mia Rose Guill	Isidore Newman School
		Samantha Knister	
4 <sup>th</sup>	<u>Animal Sciences</u>	Hayden Beard	John Curtis Christian
1 <sup>st</sup>	<u>Biomedical and Health Sciences</u>	Lizzie Robert	Isidore Newman School
3 <sup>rd</sup>	<u>Biomedical and Health Sciences</u>	Libby Payne	Isidore Newman School
4 <sup>th</sup>	<u>Biomedical Engineering</u>	Joseph Zimmermann	Holy Cross School
1 <sup>st</sup>	<u>Chemistry</u>	Allison Lopez	John Curtis Christian
4 <sup>th</sup>	<u>Chemistry</u>	John Thuer	John Curtis Christian
4 <sup>th</sup>	<u>Earth and Environmental Science</u>	Jayden Davis	Holy Cross School
4 <sup>th</sup>	<u>Energy: Sustainable Materials and Design</u>	Makenzie Morter	John Curtis Christian
1 <sup>st</sup>	<u>Engineering Technology: Statics &amp; Dynamics</u>	Grayson Barron	John Curtis Christian
3 <sup>rd</sup>	<u>Environmental Engineering</u>	Keith Chiro III	John Curtis Christian



# GNOSEF Student Successes

## 2022 LA State Science and Engineering Fair (LSEF) SENIOR DIVISION CATEGORY AWARDS (20 projects!!!) – Page 2

Place	Category	Student	School
3 <sup>rd</sup>	<u>Materials Science</u>	Jonah Cabrera	John Curtis Christian
4 <sup>th</sup>	<u>Materials Science</u>	Christian Llopis	John Curtis Christian
3 <sup>rd</sup>	<u>Mathematics</u>	Ryker Dolese	Isidore Newman School
4 <sup>th</sup>	<u>Mathematics</u>	Merrin Simmons	John Curtis Christian
4 <sup>th</sup>	<u>Microbiology</u>	Ellie Menszer	Isidore Newman School
3 <sup>rd</sup>	<u>Physics and Astronomy</u>	Gage Baldassaro	Holy Cross School
4 <sup>th</sup>	<u>Physics and Astronomy</u>	Michael O'Brien	John Curtis Christian
2 <sup>nd</sup>	<u>Plant Sciences</u>	Michael Sam-Pang	John Curtis Christian
1 <sup>st</sup>	<u>Robotics and Intelligent Machines</u>	Dylan Bracey Joshua Burk	Jesuit High School

# GNOSEF Student Successes

## 2022 LA State Science and Engineering Fair (LSEF) LSEF JUNIOR DIVISION CATEGORY AWARDS (14!!!)

Place	Category	Student	School
4 <sup>th</sup>	<u>Animal Sciences</u>	Braden Nosser	Holy Cross School
1 <sup>st</sup>	<u>Behavioral and Social Sciences</u>	Jamal Beverly	Lake Forest Charter School
2 <sup>nd</sup>	<u>Biochemistry</u>	Jaymon Williams	John Curtis Christian
1 <sup>st</sup>	<u>Biomedical and Health Sciences</u>	Ozma Baurick	International School Of Louisiana
1 <sup>st</sup>	<u>Biomedical Engineering</u>	Solomon Richardson	Holy Cross School
4 <sup>th</sup>	<u>Chemistry</u>	Elianna Prince	Lake Forest Charter School
1 <sup>st</sup>	<u>Earth and Environmental Sciences</u>	Dinah Smith	Lake Forest Charter School
3 <sup>rd</sup>	<u>Embedded Systems</u>	Emily Cabrera	John Curtis Christian
4 <sup>th</sup>	<u>Embedded Systems</u>	Gabrielle Nguyen	Lake Forest Charter School
1 <sup>st</sup>	<u>Engineering Technology: Statics &amp; Dynamics</u>	Sawyer Barron	John Curtis Christian
2 <sup>nd</sup>	<u>Engineering Technology: Statics &amp; Dynamics</u>	Maverick Hassenboehler	John Curtis Christian
4 <sup>th</sup>	<u>Environmental Engineering</u>	Andy Hoang	Lake Forest Charter School
4 <sup>th</sup>	<u>Microbiology</u>	Britney Nguyen	Lake Forest Charter School
3 <sup>rd</sup>	<u>Plant Sciences</u>	Rylee McField	Lake Forest Charter School

# GNOSEF Student Successes

## 2022 LA State Science and Engineering Fair (LSEF)

### LSEF SENIOR DIVISION SPECIAL AWARDS

Award	Name (Place)	School
<u>American Society of Civil Engineers</u>	Gage Baldassaro (1)	Holy Cross School
<u>ASM Materials Education Foundation</u>	Gage Baldassaro	Holy Cross School
<u>Mu Alpha Theta Award</u>	Ryker Dolese	Isidore Newman School
<u>Mu Alpha Theta Award</u>	Merrin Simmons	John Curtis Christian
<u>U.S. Agency for International Development (USAID)</u>	Grayson Barron	John Curtis Christian
<u>U.S. Stockholm Junior Water Award</u>	Grayson Barron	John Curtis Christian

### LSEF JUNIOR DIVISION SPECIAL AWARDS

Award	Name	School
<u>Broadcom MASTERS nominees</u>	Jamal Beverly	Lake Forest Charter School
<u>Broadcom MASTERS nominees</u>	Rylee McField	Lake Forest Charter School
<u>Naval Science Award</u>	Jamal Beverly	Lake Forest Charter School

# International Science and Engineering Fair

## Atlanta, GA May 2022



Each year, students from around the world compete in the Society for Science & the Public's more than 420 affiliated high school science fairs. Top winners compete at Regeneron ISEF where nearly 2,000 finalists are judged in 21 different categories. We are proud to support the finalists who represented the GNOSEF at ISEF.

### Recent History of ISEF Support

	<u>Phoenix 2019</u>	<u>Virtual 2020</u>	<u>Virtual 2021</u>	<u>Atlanta 2022</u>
Lodging	\$4,812			\$7,275
Airfare	\$4,033			\$1,685
Meals / Misc	\$2,291			\$2,821
ISEF Reg.	\$1,225		\$901	\$2,675
(#) Cost	(9) \$12,523	\$0	(5) \$901	(9) \$14,493



# May 2022 Regeneron International Science and Engineering Fair (ISEF)

## *Student Successes at ISEF!!*

**Grayson Barron**

**2<sup>nd</sup> Place Engineering Technology: Statics and Dynamics (\$1500)**

*"The Egg" Pool Alarm*

John Curtis Christian (teacher: Cathy Boucvalt)

**Dylan Bracey and Joshua Burk**  
**Central Intelligence Agency Award (\$1000)**

*WatchfuLock*

Jesuit High School (teacher: Helen Swan)

**Caitlin Estrada**

**Appeared on NEWSY live televised interview –  
chosen from all Environmental Engineering projects**

*Hydrokinetic Power in the Mississippi Riverbed*

Isidore Newman High School (teacher: Victoria Mercouris)

**Rachel Pizzolato**

**3<sup>rd</sup> Place Biomedical Engineering (\$1000)**

*Exploring Biomimicry of a Novel Articulating Facemask  
and 3D Printed Damping Technology in an Effort to  
Reduce, or Possibly Eliminate, Concussions and Chronic  
Traumatic Encephalopathy (CTE)*

eLearning Academy of New Orleans (mentor: Cathy Boucvalt)



NEWSY Interview:  
<https://youtu.be/cz2gsWmdOPA>

# 2021-2022 Grant from the Joe W. and Dorothy Dorsett Brown Foundation

## **TEACHER/STUDENT MENTORING PROJECT – over 150 hours!**

Experienced Mentor Teachers and Tulane graduate students **assisted 10 schools** to support students with one-on-one help and assist teachers with science fair forms!

**Teacher Mentors**  
**78 (2021: 45.5) hours of mentoring!**

**Grad Student Mentors**  
**85 (2021: 57) hours of mentoring!**

Alice Harte Charter School  
Edna Karr High School  
eLearning Academy of New Orleans  
InspireNOLA Charter School  
Isidore Newman School

Jesuit High School  
John Curtis Christian  
Lake Forest Elementary Charter School  
Patrick F. Taylor Science & Technology Academy  
Sci High

# 2021-2022 Teacher Professional Development

## GNOSEF Fall Virtual Workshop August 28 and October 2, 2021

- Sponsored by The Joe W. and Dorothy Dorsett Brown Foundation
- 20 teachers attended on August 28th and 27 teachers attended on October 2nd. All received stipends.
- 5 workshop facilitators and 4 experienced teachers received stipends.

## GNOSEF Summer Workshop

- Sponsored by the ISEF Equitable Access Grant
- In-Person workshop for middle and high school teachers designed for teachers who have not previously participated in an organized science fair before.
- Administrators are invited in-person or on Zoom for 1<sup>st</sup> hour!
- All will receive stipends \$100. \$25 Bonus if accompanied by an administrator or other member of the teacher's team.
- 15 teachers have signed up already!!

# Joe W. and Dorothy Dorsett Brown Foundation Grant – Teacher Workshop Results

## Fall Kickoff Workshop

Session	Understanding of how to help students increased ...	Content and materials were useful and relevant	I feel confident about the content presented	I plan to integrate the resources shared
<b>Steering Students to a Great Project Ideas</b>	94% (47% strongly agree)	94% (88% strongly agree)	94% (65% strongly agree)	94% (71% strongly agree)
<b>Inquiring Minds: Constructing Questions from Observations</b>	100% (59% strongly agree)	100% (82% strongly agree)	88% (65% strongly agree)	100% (64% strongly agree)
<b>Using Google Docs to Brainstorm and Develop a Research Plan with Students</b>	N/A	100% (76% strongly agree)	94% (76% strongly agree)	94% (59% strongly agree)
<b>Designing a Student Assignment Schedule</b>	N/A	88% (76% strongly agree)	88% (65% strongly agree)	88% (47% strongly agree)



# Joe W. and Dorothy Dorsett Brown Foundation Grant for 2021-22 School Year

## Teacher Feedback from Fall Workshop

- Great ideas and resources. They are very much appreciated. it is so nice to see other ideas of what schools are doing.
- I need assistance in letting students choose their scientific question. This time, the question matrix might help.
- I absolutely loved the breakout sessions and participating in it and learning about this. I have never done this before or worked with jamboard.
- I think that this format is great, and I love that teachers are always able to share resources with others.

Because of the success of the past year, **we will submit a new grant request** to continue the GNOSEF program of providing quality teacher workshops and mentoring.

# GNOSEF ASSESSMENT – Student Survey

As part of the Brown Foundation Grant, an assessment survey of the students was completed.

61/182 students responded to online survey - 51% female/49% male  
44% middle/56% high school; 51% competing for the first time

Impact of Live Judging Interviews – 82% of respondents said the conversation with the judges via Zoom impacted their understanding of their project. (32% said Definitely Yes)

Impact on Future Career in STEM: 66% indicated that as a result of their participation in GNOSEF, they had an increased interest in pursuing a career in STEM. 31% were somewhat more interested.

Enter a Future Project: 66% of respondents indicated that they would likely enter a project in a future science/engineering fair. 70% of respondents indicated that they would encourage their friends to submit a project next year.

Most Difficult Aspect of the Project: The most difficult aspects of the project, as identified by students, was designing an experiment (26%). The next most difficult aspects included collecting data (19%), analyzing data (19%), and preparing the presentation (19%).

# GNOSEF ASSESSMENT – Student Comments

- *It was a great experience!!! However, I sure do miss interacting with the judges and all the participants in person. If this was the first time I did the science fair, I would not have anything to compare it to, but I've been here since 6th grade, and GNOSEF has been an incredible part of my life. So many doors have opened for me because I participated in science fairs. It has been the best part of my junior high and high school experience. I want to let everyone know at GNOSEF how important they have been in my life. Thank you so very much!!*
- *I thought the interview was a very helpful and useful tool in seeing how a panel of judges work and how they grade science fair projects. Seeing this inspires me to do the best work I can do.*
- *It was a very interesting project and I would love to continue it. The judges helped me for my future projects.*
- *I learned so much about 3D design, modeling, the engineering process, and woodworking through creating this process. I'll always be thankful for that, no matter the outcome of the fair.*

# Teacher and Judge Surveys – great input!

TEACHERS – 7 respondents out of 22 teachers

This was AGAIN a very challenging/stressful year for teachers!

- 50% met with virtually with a GNOSEF mentor; 50% had students that met virtually with grad student mentors
- 100% thought students' projects were fairly judged
- Good suggestions for workshop topics (statistics and creating/organizing local fairs)

JUDGING – 11 respondents out of 84 judges

- 55% new judges
- 100% were interested in judging in the future.
- 3 judge respondents said they would be interested in mentoring students in the future!



# PR Effort (TV)

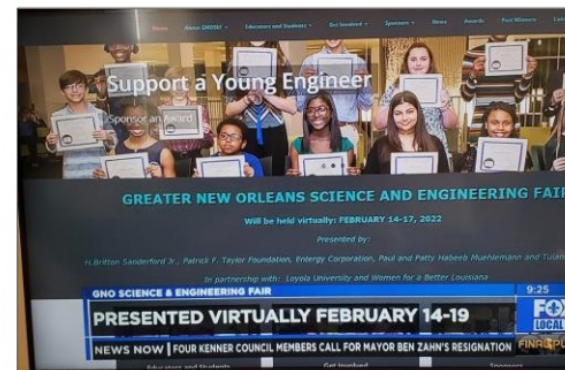
Ann Wills PR

## TELEVISION:

### **WVUE FOX 8 (FOX) Morning Edition (Total Viewership: @45,605) – Monday, Feb. 17**

Dr. Katherine Schilling and Jabaree Monday/Holy Cross High School with Host Bruce Katz on WVUE FOX 8 Morning Edition:

<https://www.fox8live.com/video/2022/02/17/gno-science-engineering-fair/>



### **WWL TV 4 (CBS) Morning Show (Total Viewership: @15,683), Monday, Feb. 14**

Dr. Annette Oertling and Caitlin Estrada/ Isadore Newman High School with Host Leslie Spoon (Link unavailable)



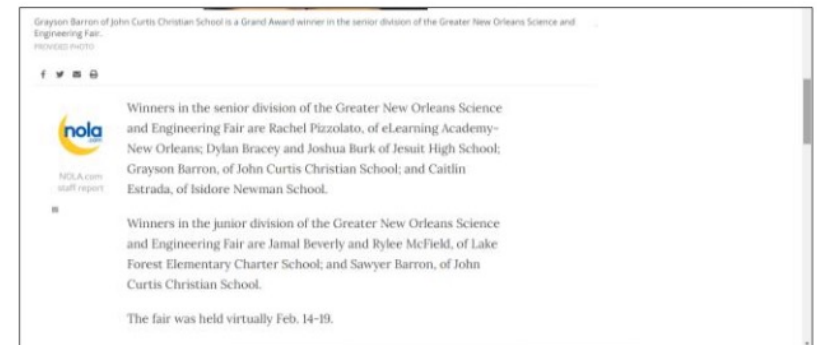
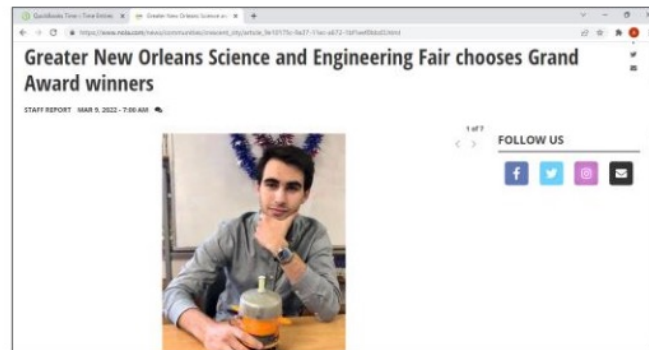
# PR Effort (Print)

Ann Wills PR

## PRINT/ONLINE:

**New Orleans Advocate – March 9 (Daily Circulation: 100,000)**

[https://www.nola.com/news/communities/crescent-city/article\\_9e10175c-9a37-11ec-a672-1bf1eef0bbd3.html](https://www.nola.com/news/communities/crescent-city/article_9e10175c-9a37-11ec-a672-1bf1eef0bbd3.html)



## **GNOSTEM**

<http://gnostem.org/>

<http://gnostem.org/services-view/greater-new-orleans-science-engineering-fair/>



# PR Effort (Radio and Social Media)

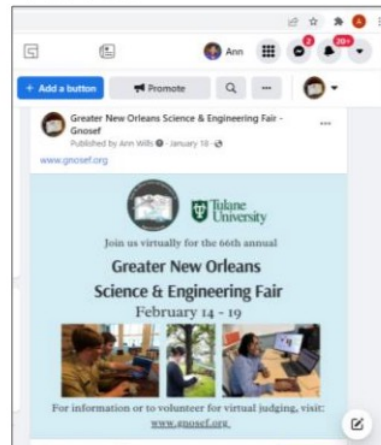
Ann Wills PR

## RADIO:

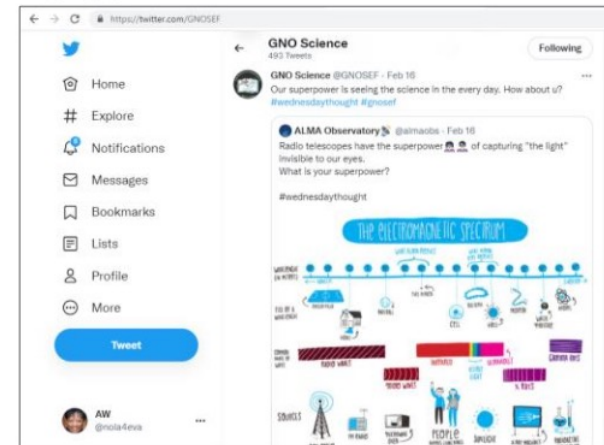
**WWOZ FM.org (Community Radio - WWOZ.org has over 100,000 monthly unique visitors)**  
<https://www.wwoz.org/events/725041>

## SOCIAL MEDIA\*:

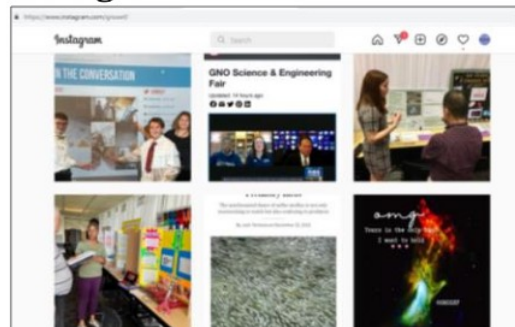
### Facebook



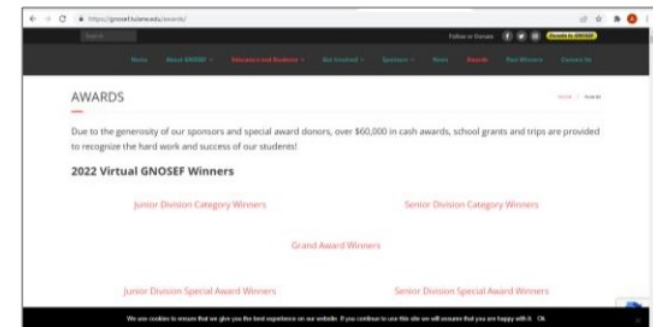
### Twitter



### Instagram



### GNOSEF website - Awards





# GNOSEF, Inc. EXPENSES AND INCOME

	<u>2020</u>	<u>2021</u>	<u>2022</u>
<b>EXPENSES</b>			
<b>§ Teacher Resources – Workshops and Mentoring Program</b>	<b>\$14,249</b>	<b>\$16,302</b>	<b>\$14,500</b>
<b>§ Awards</b>			
• Students Category Cash Awards	\$4,550	\$4,205	\$4,205
Scholarships by Donors	\$11,500	\$10,500	\$10,500
Dedicated Student Awards	\$400	\$450	\$450
• Teacher Recognition GNOSEF Jr. Div. Teacher Awards	\$975	\$1,000	\$1,000
Dedicated Teacher Awards (DeLaHoussaye Mentor/STAR/BJHeim/ASCE)	\$5,050	\$2,650	\$3,150
• Patrick F. Taylor School Grants	\$10,000	\$10,000	\$10,000
• Medals and Plaques	\$796	\$1,037	\$949
• Twitter Contest Prizes	\$198	\$326	\$282
<b>Sub-Total</b>	<b>\$33,469</b>	<b>\$30,168</b>	<b>\$30,536</b>
<b>§ Operating Expenses</b>			
• STEM Library Lab Membership (replaces Mini-Grants)	\$2,241	\$2,231	\$2,000
• Assessment Survey and Analysis	\$200	\$200	
• Food - Judges and Volunteers and Teacher Workshops at Fair	\$7,504	\$0	\$0
• Facility Costs Rental (includes tables and chairs)	\$2,918	\$0	\$0
Pipe&Drape	\$1,604	\$0	\$0
• Public Relations - Ann Wills	\$5,140	\$4,050	\$4,230
• Supplies (t-shirts/signage/photography expenses/postage/etc.)	\$1,484	\$236	\$932
• Operating Costs (ISEF affl., Sec. of State, tax prep; insurance)	\$4,895	\$3,900	\$5,070
• Virtual Fair – Technical support		\$3,500	\$2,500
<b>Sub-Total</b>	<b>\$25,986</b>	<b>\$14,117</b>	<b>\$14,732</b>
<b>§ International</b>			
• Registration, travel, housing, food, misc.	<b>\$0</b>	<b>\$901</b>	<b>\$13,994</b>
<b>TOTAL EXPENSES</b>	<b>\$73,704</b>	<b>\$61,488</b>	<b>\$73,762</b>
<b>INCOME</b>			
• Unrestricted Donations	\$53,937	\$58,545	\$45,400
• Brown Foundation Grant	\$12,390	\$14,951	\$10,000
• Bruce J. Heim Foundation Grant			\$3,000
• ISEF Equitable Access Grant			\$7,000
• Reclaimed Amazon Gift Cards	\$705	\$535	\$733
• Dedicated Awards (Incl. pledged as scholarships)	\$29,091	\$25,081	\$25,100
<b>TOTAL INCOME (includes pledged awards)</b>	<b>\$96,123</b>	<b>\$99,112</b>	<b>\$91,233</b>
<i>Income – Expenses</i>	<i>\$22,419</i>	<i>\$37,624</i>	<i>\$17,471</i>



<b>GNOSEF FINANCIAL STATUS</b>		<b>May 1, 2022</b>
Capital One Account Balance		
	Escrow Account	\$120,283.23
	Card Account	\$3,402.66
Whitney Acct Balance		\$35,192.49
Ameritrade Account (Ins.Dep.Acct.)		\$73,317.76
PayPal Account		\$2,401.98
Reclaimed Amazon Gift Card Balance		\$0.00
Tulane K-12 STEM Account		\$7,808.85
Remaining Anticipated Funds & Award Reimbursements		\$14,000.00
<i>(Pledged funds and award reimbursements)</i>		
Committed Taylor Awards		-\$34,497.57
Committed Habeeb/Entergy/Brown Scholarships		-\$12,000.00
Remaining Estimated Expenditures 2021-22		-\$33,518.33
<i>(incl. uncashed checks , ISEF Hotels, June Workshop, etc.)</i>		
Bruce J. Heim Grant for 2022 fall workshop/mentoring		-\$3,000.00
<b>TOTAL Unrestricted Funds Available</b>		<b>\$173,391.07</b>

# GNOSEF Future Wish List

- Further increase the number in the GNOSEF ISEF delegation (~\$1,750 per person)
  - Currently budget 4 Senior Division Grand Award winners, 2 teachers, Judge Advisor, Scientific Review Committee Chair, 1 "Adult-In-Charge", and a 5<sup>th</sup> student in case of a team project
  - Because of the impact on participating teachers, we would like to send all 4 teachers of the Grand Award winners. Since we have been successful with 1 teacher serving as "Adult in Charge", this only adds 1 more to the current budget (+\$1,750)
- Paid Bookkeeper and Executive Director position  
(to evolve, we need to start thinking about this!)
- Stipends for School Science Fair Directors who host school science fairs and participate in the GNOSEF  
(currently just an idea...)

# Board Business

- Nomination of new Board Member
  - Leo Holzenthal, M.S. Benbow and Associates
  
- Nomination of 2022-23 Board Officers
  - President – Annette Oertling
  - Secretary – Danielle Scanlon
  - Treasurer – Lorraine McGinley
  
- 2022-23 Budget Proposal

## GNOSEF, Inc. EXPENSES with PROPOSED BUDGET for 2023

	APPROVED	ACTUAL	PROPOSED
	In-Person	Hybrid	In-Person
	2022	2022	2023
<b>EXPENSES</b>			
<b>§ Teacher Resources – Workshops and Mentoring Program</b>			
Brown Foundation Grant		\$10,000	\$10,000
ISEF Grant		\$4,500	\$3,000
Bruce J. Heim Grant (received)			\$3,000
<b>Sub-Total</b>	<b>\$16,850</b>	<b>\$14,500</b>	<b>\$16,000</b>
<b>§ Awards</b>			
• Students Category Cash Awards	\$4,600	\$4,205	\$4,600
Dedicated Scholarships by Donors	\$10,500	\$10,500	\$10,500
Dedicated Student Awards	\$450	\$450	\$450
• Teacher Recognition GNOSEF Jr. Div. Teacher Awards	\$1,000	\$1,000	\$1,000
Dedicated Teacher Awards (DeLaHoussaye/STAR/BJHeim/ASCE)	\$3,150	\$3,150	\$3,150
• Patrick F. Taylor School Grants – dedicated	\$10,000	\$10,000	\$10,000
• Medals and Plaques	\$1,200	\$949	\$1,200
• Twitter Contest Prizes	\$300	\$282	\$300
<b>Sub-Total</b>	<b>\$31,200</b>	<b>\$30,536</b>	<b>\$31,200</b>
<b>§ Operating Expenses</b>			
• STEM Library Lab Membership (replaces Mini-Grants)	\$2,000	\$2,000	\$2,000
• Food - Judges and Volunteers and Teacher Workshops at Fair	\$7,600	\$0	\$7,600
• Facility Costs Rental (includes tables and chairs)	\$3,000	\$0	\$3,000
Pipe&Drape	\$2,000	\$0	\$2,000
• Public Relations - Ann Wills	\$5,200	\$4,230	\$5,200
• Supplies (t-shirts/signage/photography expenses/postage/etc.)	\$1,000	\$932	\$1,000
• Operating Costs (ISEF affl., Sec. of State, tax prep; insurance)	\$5,000	\$5,070	\$5,000
• Virtual Fair – Technical support		\$2,500	
<b>Sub-Total</b>	<b>\$25,800</b>	<b>\$14,732</b>	<b>\$25,800</b>
<b>§ International</b>			
• Registration, travel, housing, food, misc.	<b>\$15,000</b>	<b>\$13,994</b>	<b>\$16,750</b>
<b>TOTAL EXPENSES</b>	<b>\$88,850</b>	<b>\$73,762</b>	<b>\$89,750</b>



# GNOSEF Strengths

(CONTRIBUTING TO THE SUCCESS OF THE PROGRAM)

- Over \$60,000 provided in recognition of student achievement and teacher/mentor contributions (ie. cash, trips, prizes, grants)
- Continued Financial Support from Dedicated Individuals, Corporate and Foundation Sponsors!
- Dedicated Scientific Review Committee working year-round
- Teacher Workshops plus teacher support year-round, which now includes experienced “Teacher Mentors” and graduate student mentors for student participants
- Highly Qualified Judges
- Dedicated Fair Volunteers and Planning Committee

# 2022-23 Proposed Calendar

- **August 27**                      **Teacher Workshop and Kickoff**
- **October 3**                      **School Affiliation Forms Due**
- **October 13**                      **Submit Project for Pre-Approval to SRC**
- **December 2**                      **All Pre-Approvals Must be Completed**
- **January 13**                      **Project Registration/Document Deadline**
- **February 6**                      **All Project Documents and Requested Revisions Must be Approved**
- **Feb. 27-March 2**              **GNOSEF**
- **March TBD**                      **Registration Deadline for State Fair**
- **March TBD**                      **LA Science and Engineering Fair**
- **May TBD**                      **International Science and Engr. Fair (ISEF)**