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

June 20, 2024

MICHELLE SANCHEZ, PH.D., FAIR DIRECTOR AND ANNETTE OERTLING, PH.D., PRESIDENT

A Year in Review

- ▶ GNOSEF (Regional Fair)
- Grants and Professional Development
- LSEF (Louisiana Science and Engineering Fair)
- ▶ ISEF (International Fair)
- Surveys and PR Report
- Financial Report
- ► GNOSEF Wish List
- Board Business
- GNOSEF Strengths
- Calendar for 2024-25



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.

2023-24 Board of Directors

	First Name	Last Name	Affiliation
1	Harriet	Aguiar-Netto	Women for a Better Louisiana
2	Nick	Altiero	Tulane University-retired
3	Cathy	Boucvalt	John Curtis Christian - retired
			John C. Stennis Space
4	Larry	Dequay	Center/NASA/AIAA
5	Scott	Edwards	LSUHSC
6	Leo	Holzenthal	Benbow and Associates
7	Nancy	Hopkins	Tulane University-retired
8	Barbara	LaNasa	Women for a Better Louisiana
9	Lorraine	McGinley	Tulane University

	First Name	Last Name	Affiliation
10	Annette	Oertling	Tulane University - retired
11	Barbara	Pailet	Bruce J. Heim Foundation
12	Michelle	Sanchez	Tulane University
13	Arman	Sadeghpour	Theodent/Tulane University
14	Britton	Sanderford	Axonn Corp., UNO Foundation
15	Danielle	Scanlon	Tulane University
16	Janell	Simpson	Patrick F Taylor School - retired
17	Erica	Smith	Tulane University
18	Andrea	Walker	GNOSTEM Initiative-retired

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

H. Britton Sanderford (2012-2024)

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 (2017-2024)



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 (2007-2024)



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 Sustainability Sponsorship (2018-2024)

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 (\$2,500-\$7,499) *

The Joe W. and Dorothy Dorsett Brown Foundation (2019-2024)



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.

BW² (2019-2024)

BW² also provides the GNOSEF Star Teacher Awards – this 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.

Broadcom Foundation (2024)



Broadcom Foundation also provides the Broadcom Coding with Commitment™ award, which recognizes students in middle school who combine STEM learning with coding to solve a community problem they care about in their neighborhood, region, or on planet Earth that aligns with the 17 Sustainable Development Goals of the United Nations.

Greater New Orleans Region One Center for STEM (GNOrocs) (2024)



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

American Petroleum Institute-Delta Chapter (2012-2024)



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.

Association for Materials Protection and Performance (AMPP) Southeast Louisiana Chapter (formerly NACE New Orleans) (2008-2024)



The Southeast Louisiana Chapter of the Association for Materials
Protection and Performance 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.

Laitram Corporation (2017-2021,2023-2024)

Leo Holzenthal (2024)



M.S. Benbow and Associates (2024)



2024)



Society of Petroleum Engineers - Delta Chapter (2012-

M.S. Benbow and Associates also provides a \$100 first prize and a \$75 second prize for outstanding Senior Division projects in the field of Electrical Engineering.

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

American Society of Civil Engineers – New Orleans Branch (Local) (2018-2024)

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) *

The Bruce J. Heim Foundation (2010-2024)

Dr. Harriet Aguiar-Netto (2010-2024)

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.

* Yellow Ribbon Sponsor (\$100-\$249) *

Annette Oertling¹, Harry Clark¹

* Honorable Mention (Up to \$99) *

American Welding Society: N.O. Section (2008-2024)

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.

Barbara LaNasa¹, Justine Aguiar¹, Norma Jean Mattei¹, Colleen Yates¹, Anonymous¹

* School Grants and Scholarships * (not listed above)

Greater New Orleans Science and Engineering Fair Middle School Award (2022-2024)

Sponsored by Tom and Jean Brett

* Community Supporters *

Tulane Center for K-12 STEM Education

Loyola University

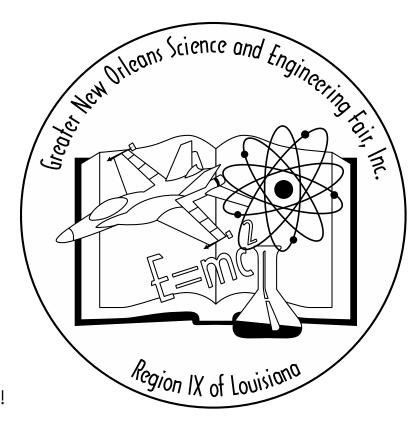
Women for a Better Louisiana

STEM Library Lab

GNOSEF – By the Numbers

February 26th-March 3rd, 2024

- **274** middle and high school students
- 222 science and engineering fair projects
- ▶ **150** category winners
- **60** projects participating in the LA Science and Engineering Fair
- 59 junior category judges
- 47 senior category judges
- 30 categories
- ▶ **28** GNOSEF sponsors
- 27 local organizations providing student and teacher awards
- 23 dedicated teachers
- ▶ 18 national organizations providing student awards
- ▶ 17 local schools
- 14 safety and display judges
- 12 Grand Award judges
- ▶ 11 Tulane undergraduate volunteers
- ▶ **10** graduate student mentors
- 10 devoted GNOSEF coordinators
- > 7 Grand Award winners
- ▶ **4** projects participating in the International Science and Engineering Fair!
- 1 AMAZING GNOSEF!



GNOSEF – Junior Division

February 26th-March 3rd, 2024



11 Junior Division Schools Participated

- Academy of the Sacred Heart
- Alice Harte Charter School
- Holy Cross School *
- •International School of Louisiana Camp
- •Islamic School of Greater New Orleans
- Jesuit High School
- John Curtis Christian *
- •Lake Forest Elementary Charter School
- Patrick F. Taylor Science & Technology Academy *
- •St. Catherine of Siena
- •Trinity Episcopal School



vision Grand Award

Junior Division Grand Award Winners

- •Caleb Colbert Lake Forest Elementary Charter School (right)
- Mario Myles Lake Forest Elementary Charter School (left)
- •Also pictured (left) Interim Dean Leonard Kahn, Loyola School of Arts and Sciences and Associate Dean Beth Wee, Tulane School of Science and Engineering

GNOSEF – Senior Division

February 26th-March 3rd, 2024



9 Senior Division Schools Participated

- Edna Karr High School
- Haynes Academy for Advanced Studies
- Holy Cross School *
- Isidore Newman School
- John Curtis Christian *
- •Kenner Discovery Health Sciences High School
- Patrick F. Taylor Science & Technology Academy *
- •Sci High
- •The Willow School



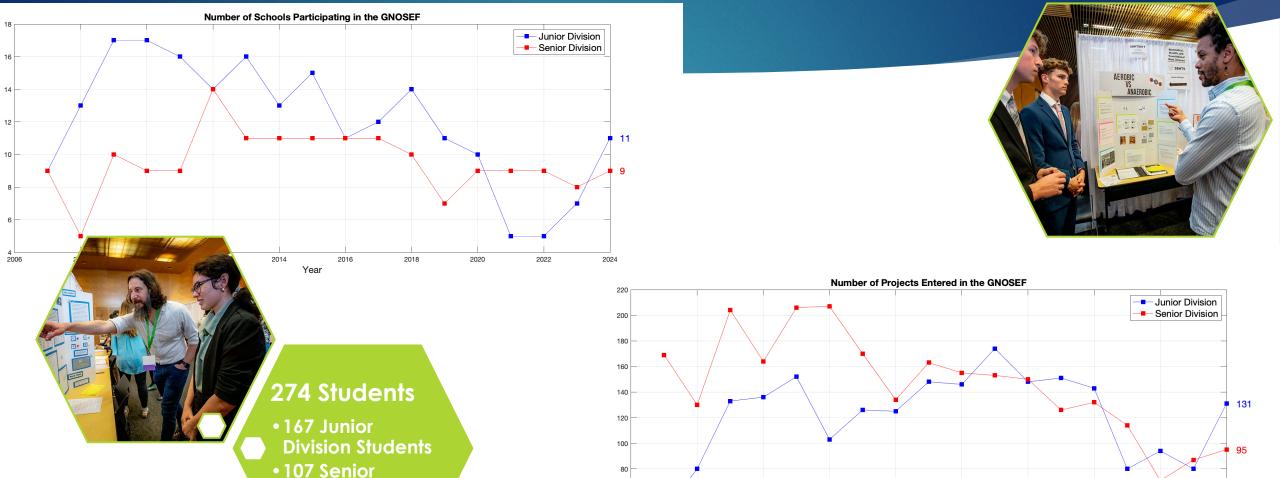
Senior Division Grand Award Winners

- Vaishnavi Kumbala Haynes Academy for Advanced Studies (left)
- •Stella Bourke The Willow School (2nd from left)
- Jackson Dirks and Jai Bansal Isidore Newman School (middle)
- •Quang Tran Patrick F. Taylor Science & Technology Academy (right)
- •Cole Davis Patrick F. Taylor Science & Technology Academy (not pictured)
- Also pictured (left) Interim Dean Leonard Kahn, Loyola School of Arts and Sciences and Associate Dean Beth Wee, Tulane School of Science and Engineering
- Also pictured (right) Dr. David Kern, Isidore Newman School and Cheryl Bordelon, Patrick F. Taylor Science & Technology Academy

Participation in GNOSEF since 2007

Division Students

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



Year

2024 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.
 - Awards are given by the GNOSEF in each category.
- ▶ 1st and 2nd place winners in both the junior and senior divisions were certified for entry in the 2024 Louisiana Science and Engineering Fair (LSEF) at LSU this year!

1st Place

- Junior Division \$50 and medal
- Senior Division \$75 and medal

2nd Place

- Junior Division \$30 and medal
- Senior Division \$50 and medal

3rd Place

- Junior Division \$15 and medal
- Senior Division \$25 and medal

Honorable Mention

- Junior Division \$10
- Senior Division \$15

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.
- ▶ 2024 Awards
 - ▶ Due to quality of student nominations, one 1st place \$1500 award and one 2nd place \$500 award were given.
 - ▶ 1st Place Dr. Katherine Schilling Holy Cross School (right)
 - ▶ 2nd Place Sheila Lumod Edna Karr High School (left)



Patrick F. Taylor School Grants

Senior Division

Sponsored by Patrick F. Taylor Foundation ● Established 2008



- Objective: Provide incentive to increase student interest, enrollment, and performance in upper-level math and science courses through participation in the GNOSEF.
- ▶ 2024 Awards
 - \$10,000 materials and field trip grant divided among eligible high schools.
 - > \$2,000 grants to five school winners in the senior division
 - ► Edna Karr High School
 - ► Holy Cross School
 - ► Isidore Newman School
 - ► Kenner Discovery Health Sciences High School
 - ► Patrick F. Taylor Science and Technology Academy



GNOSEF Middle School Grants

Junior Division

Sponsored by Tom and Jean Brett • Established 2022

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

▶ 2024 Awards

- \$7,500 materials and field trip grant divided among eligible middle schools.
- > \$1,875 grants to four school winners in the junior division
 - ► Holy Cross School
 - ► Lake Forest Elementary Charter School
 - ▶ St. Catherine of Siena
 - ► Trinity Episcopal School



Tulane Science Scholars Program Scholarship

Senior Division

Sponsored by Tulane Center for K-12 STEM Education 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.
- \$5,595 summer for-credit scholarship for in-person residential experience was provided to two students
- 2024 Award Recipients
 - ► Noor Farhoud Patrick F. Taylor Science & Technology Academy
 - Keith Thibodaux Patrick F. Taylor Science & Technology Academy
 - ▶ Also pictured Dr. Michelle Sanchez, GNOSEF Director







The "Aspiring Researcher" Scholarship presented by the Emmy Noether Awards

Senior Division

Sponsored by The Joe W. and Dorothy Dorsett Brown Foundation ● Established 2019

- A \$2,500 undergraduate scholarship is awarded to a female high school student who demonstrates passion and promise for scientific research.
- The scholarship is presented upon receipt of an acceptance letter into a college of their choice.
- ▶ 2024 Award Recipient
 - Christiana Le Patrick F. Taylor Science & Technology Academy



Patrick F. Taylor School Scholarship Awards

Senior Division

Sponsored by Patrick F. Taylor Foundation ● Established 2008



- All five Grand Award winners in the senior division receive a \$1,000 scholarship from the Patrick F. Taylor Foundation upon presentation of an acceptance letter into a college of their choice.
- 2024 Awards
 - Vaishnavi Kumbala Haynes Academy for Advanced Studies
 - Stella Bourke The Willow School
 - Jackson Dirks Isidore Newman School
 - Jai Bansal Isidore Newman School
 - Quang Tran Patrick F. Taylor Science & Technology Academy
 - Also pictured David Kern, Isidore Newman School, Cheryl Bordelon, Patrick F. Taylor Science & Technology Academy



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.
- ► This \$500 scholarship is presented upon receipt of an acceptance letter into a college of their choice.
- ▶ 2024 Award Recipients (Team Project)
 - Jai Bansal (left) & Jackson Dirks (right) Isidore
 Newman School

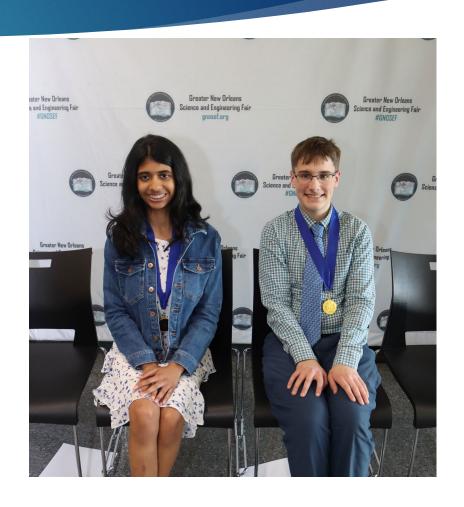


Albert F.W. Habeeb, M.D. and Dorothy Van Lue Habeeb Scholarship Awards

Senior Division

Sponsored by Patty Habeeb Muehlemann • 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.
- ▶ 2024 Award Recipient
 - Vaishnavi Kumbala Haynes Academy for Advanced Studies (left)
- 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.
- 2024 Award Recipient
 - Edwin Salisbury Isidore Newman (right)



Entergy Corporation "Powering the Future" Scholarship Award

Senior Division

Sponsored by Entergy • Established 2017



- ▶ A \$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.
- ▶ 2024 Awards
 - Staicy Triminio Sci High



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.

- ► 2024 Award Recipients
 - ► Cheryl Bordelon Patrick F. Taylor Science & Technology Academy
 - ► Marla Watts Lake Forest Elementary
 - Sharika Hagan Lake Forest Elementary
 - ▶ Tara Lavender Holy Cross School



GNOSEF Star Teacher Awards

Both DivisionsSponsored by BW² • Established 2021

- 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.
- ▶ 2024 Junior Division Award Recipients (top)
 - Sean Murphy Trinity Episcopal School
 - ► Gretchen Treadway St. Catherine of Siena Catholic School
 - Ceci Foster Trinity Episcopal School
 - ► Anna Haddow International School of Louisiana Camp
- 2024 Senior Division Award Recipients (bottom)
 - Sheila Lumod Edna Karr High School
 - Dr. Katherine Schilling Holy Cross School



GNOSEF Volunteer of the Year

Sponsored by GNOSEF • Established 2020

Presented to the GNOSEF volunteer who goes above and beyond to empower youth to pursue scientific inquiry and engineering design.

2024 Award Recipient

- Dr. Nancy Hopkins longtime Judge Advisor
 - Also pictured Dr. Michelle Sanchez, GNOSEF Director and Dr. Erica Smith, GNOSEF Judge Coordinator



Additional Local Special Awards



American Society of Naval Engineers

American Institute of Aeronautics and Astronautics – Greater New Orleans Section

American Institute of Chemical Engineers – New Orleans Section

American Petroleum Institute (API) Delta Chapter

American Society of Civil Engineers – N.O. Branch

American Society of Naval Engineers

American Welding Society - New Orleans Section

Association for Materials Protection and Performance (AMPP) Southeast Chapter (formerly NACE New Orleans)

Biophysical Society

Bruce J. Heim Foundation

Community Leader, Presented by Ochsner Health

Greater New Orleans STFM Initiative

M.S. Benbow & Associates

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

Structural Engineering Institute of the American Society of Civil Engineers-N.O. Branch

Tulane Brain Institute Award

U.S. Department of Agriculture

Women for a Better Louisiana

v Orleans)

American Institute of Aeronautics and

Astronautics - GNO Section

Tulane Brain Institute Award



American Welding Society – New Orleans Section



Additional National Special Awards

American Psychological Association

ASM Materials Education Foundation: In Partnership with Association for Materials Protection and Performance (AMPP)
Southeast Chapter

Association for Women Geoscientists Foundation

Broadcom Coding with Commitment™

Department of Defense (DoD) STEM Leadership Prize

Lemelson Early Inventor Prize - 2024

NASA EARTH System Science Award

National Oceanic and Atmospheric Administration (NOAA)

Office of Naval Research (U.S. Navy/ U.S. Marine Corps)

Regeneron Biomedical Science Award

Ricoh Americas Corporation

Society for In Vitro Biology

Society for Science 2024 Community Innovation Award

Thermo Fisher Junior Innovator's Challenge (JIC)

U.S. Agency for International Development (USAID)

U.S. Air Force

U.S. Metric Association

Yale Science & Engineering Association, Inc.





Experienced mentor teachers and Tulane graduate students assisted schools to support students with one-on-one mentoring and to help teachers with science fair forms, guiding students, etc.

Over **130 hours** of mentoring!

Teacher Mentoring

• 63 hours!!

Grad Student Mentoring

• 68 hours!!

15 schools received mentoring!!

Academy of the Sacred Heart

Benjamin Franklin High School

Edna Karr High School

Haynes Academy for Advanced Studies

Holy Cross School

Isidore Newman School

Islamic School of GNO

John Curtis Christian

Kenner Discovery Health Sciences HS

Lake Forest Elementary Charter School

Patrick F. Taylor Science & Technology Academy

Sci High

St Catherine of Siena

St. Matthew the Apostle School

Trinity Episcopal School

2023-2024 Professional Development

► GNOSEF Fall In-Person Workshop August 26 and October 7, 2023

- Sponsored by The Joe W. and Dorothy Dorsett Brown Foundation
- 29 teachers attended on August 26th and 12 teachers attended on October 7th. All received stipends.
- 3 workshop facilitators and 3 experienced teachers received stipends
- Thanks to STEM Library Lab for hosting!

GNOSEF Summer Workshop June 22, 2024

- In-Person workshop for middle and high school teachers focused on Science Fair Modeling. Help new and experienced teachers develop student engagement from a general interest topic into a scientific testable question or engineering design.
- All 21 teachers received \$100 stipends if they affiliate with us for the 2024-25 school year.
- Will receive an additional stipend if they meet with a teacher mentor this fall and submit at least 5 projects to the GNOSEF thanks The Brown Foundation!



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	I plan to use a mentor to help me prepare for GNOSEF
Getting Started in YOUR Classroom	93% (67% strongly agree)	100% (81% strongly agree	93% (59% strongly agree	96% (67% strongly agree	N/A
Getting Started: Research Plan and Prior Approvals	96% agree (70% strongly agree)	100% agree (70% strongly agree)	96% agree (59% strongly agree)	96% agree (59% strongly agree)	N/A
Getting Started: Resources and Mentors	100% agree (74% strongly agree)	93% (70% strongly agree	93% (62% strongly agree	85% (54% strongly agree	Teacher Mentor: 66% yes/26% unsure Grad Student Mentor: 59% yes/33% unsure
Scientific Review Committee – Fair Forms	100% (67% strongly agree	100% (83% strongly agree	100% (67% strongly agree	N/A	N/A
From Research Plan to Regional Fair – What Students Need to Prepare for Judging	100% (83% strongly agree	100% (83% strongly agree	92% (75% strongly agree	N/A	N/A

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

Teacher Feedback from Fall Workshops

- Suggestions for improvement of future GNOSEF teacher workshops and positive feedback:
 - ▶ A "school science fair set up" workshop would be awesome.
 - Some models of paperwork forms would be helpful.
 - The workshops are always very informative. I love the practice and examples that are given. I do not feel that any improvements are needed besides continuing to have teachers who participate in the science fair give their personal examples of resources and projects from students.
 - ▶ I think the seminar provides great and helpful information
- Because of the success of the past year, we already submitted a grant request to continue the GNOSEF program of providing quality teacher workshops and mentoring. The grant was approved for \$20,000 for 2024-2025.

STEM Library Lab Membership



- Through a partnership with the STEM Library Lab (SLL), materials and equipment requests were provided to students at 14 schools (16 teachers)!!
- ► Partnership with SLL \$2000 annual cost with \$1000 budget for consumables
- ▶ 2024: \$1521.52 for consumables (owe the balance of \$521.52 to SLL).
 - Schools (# of teachers) that used consumables Edna Karr High School (2), Holy Cross School (1), International School of LA (2), Isidore Newman School (1), and St. Catherine of Siena (1) 5 schools and 7 teachers!
 - Schools that borrowed equipment Edna Karr, HART Academy, Holy Cross School, J.D. Meisler, J.Q. Adams, Patrick F. Taylor Science and Technology Academy, ReNEW Dolores T. Arthur, Riverdale, Ron's Brothers, Sci High, St. Catherine, and Trinity Episcopal 12 schools and 12 teachers!
- The objective was to provide equipment and consumables for 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.
- ► ALL AFFILIATED SCHOOLS ARE ELLIGIBLE AND NOTIFIED!

Student Successes at the Louisiana Science and Engineering Fair (LSEF)

7 Junior Division

Category Winners

Place	Place Category		School
4th	4th Chemistry		International School of Louisiana - Camp
3rd Energy: Sustainable Materials & Design		Osayi Igbinoghene	Lake Forest Elementary Charter School
3rd Environmental Engineering		Emelia Uzee	St. Catherine of Siena
2nd Plant Sciences		Dallas Harrell	Lake Forest Elementary Charter School
1st Robotics & Intelligent Machines		Lillian Dawson	St. Catherine of Siena
2nd Systems Software		Duy-Quat Truong	Lake Forest Elementary Charter School
1st	Technology Enhances the Arts	Sally Majoria	John Curtis Christian

Student Successes at the Louisiana Science and Engineering Fair (LSEF)

Place	Place Category		School Division	
3rd	3rd Animal Science		Isidore Newman School	
3rd Biochemistry		Jaymon Williams	John Curtis Christian	
2nd Biomedical & Health Sciences2nd Biomedical Engineering		Amar Walia	Isidore Newman School	
		Staicy Triminio	New Orleans Charter Science and Mathematics HS (Sci High)	
4th	Computational Biology	Thomas Gershanik	Isidore Newman School	
2nd Earth & Environmental Sciences		Jayden Davis	Holy Cross School	
4th Energy: Sustainable Materials & Design		Najah Honore'	Edna Karr High School	
4th Engineering Technology: Statics & Dynamics		Andrew Treadway	Holy Cross School	
3rd Environmental Engineering		Cole Bui	Patrick F. Taylor Science Technology Academy	
3rd	3rd Materials Science		Holy Cross School	
3rd	3rd Mathematics		Patrick F. Taylor Science Technology Academy	
4th	4th Plant Sciences		Patrick F. Taylor Science Technology Academy	
3rd	Systems Software	Catherine McBrayer	Patrick F. Taylor Science Technology Academy	

Category

Student Successes at the Louisiana Science and Engineering Fair (LSEF)

Junior Division Special Award Winners

Thermo Fisher Scientific Junior Innovators Challenge (JIC) Nominees		
Sally Majoria	John Curtis Christian	
Emelia Uzee	St. Catherine of Siena	

Senior Division Special Award Winners

Louisiana Science Teachers Association Special Award			
Riley Doherty	Patrick F. Taylor Science Technology Academy		
Malik Adams Sarah Nguyen	Patrick F. Taylor Science Technology Academy		
Louisiana Association of Teachers of Mathematics			
Quang Tran	Patrick F. Taylor Science Technology Academy		
Louisiana State Horticultural Society Special Award			
Demi Harrison	Patrick F. Taylor Science Technology Academy		

6 Special Award

Winners



International Science and Engineering Fair Los Angeles, CA May 2024

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 over 1,700 finalists from 67 countries are judged in 22 different categories. We are proud to support the finalists who represented the GNOSEF at ISEF.



	<u>Virtual 2020</u>	<u>Virtual 2021</u>	<u>Atlanta 2022</u>	<u>Dallas 2023</u>	Los Angeles 2024
Lodging			\$7,275	\$7,032	\$6,770
Airfare			\$1,685	\$2,512	\$3,388
Meals/Misc			\$2,821	\$2,246	\$2,581
ISEF Reg.		\$901	\$2,675	\$2,650	\$3,700
(#) Cost	\$0	(5) \$901	(9) \$14,493	(9) \$14,755	(8) \$16,439

Columbus, OH in 2025!

May 2024 Regeneron International Science and Engineering Fair (ISEF) Student Participants

Quang Tran (1st from left)

On the inversion of the divisor function of the averaged divisor function and its error term: the Hardy Littlewood function

Patrick F. Taylor Science & Technology Academy (teacher: Cheryl Bordelon)

Jai Bansal and Jackson Dirks (2nd and 5th from left)

The Application of Machine Learning in the Mitigation of Waste Pollution

Isidore Newman School (teacher: Dr. David Kern)

Cole Bui (3rd from left)

Smart Trash Can Monitors for Human Waste Disposal Pattern Detection

Patrick F. Taylor Science & Technology Academy (teacher: Cheryl Bordelon)

Vaishnavi Kumbala (4th from left)

Chymase Connection: Examining Differences In Chymase Levels Between Chronic Kidney Disease (CKD) and non-CKD Patients Independent of Current Treatments, Demographics, and Clinical Risk Factors



Haynes Academy for Advanced Studies (teacher: Ronald Coats)

May 2024 Regeneron International Science and Engineering Fair (ISEF) Student Successes at ISEF!!

American Mathematical Society

1st Place Award of \$2,000 and One-Year Membership to American Mathematical Society

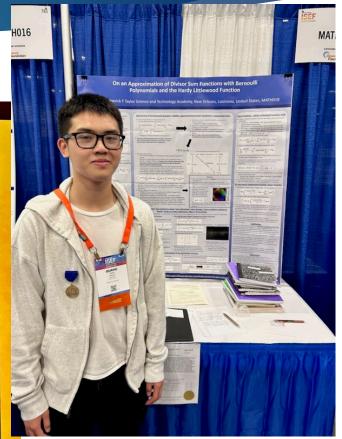
Quang Tran, Patrick F. Taylor Science & Technology Academy, Harvey, LA

Mu Alpha Theta, National High School and Two-Year College Mathematics Honor Society

2nd Place Award of \$1,000

Quang Tran, Patrick F. Taylor Science & Technology Academy, Harvey, LA





GNOSEF Assessment – Student Survey

- ▶ 197/274 students responded to online survey (72%, up 23% from last year!)
- ▶ 86% competing for the first time
- Impact of Judges: 88% of respondents said the conversation with the judges impacted their understanding of their project. (54% said Definitely Yes)
- Use Materials from STEM Library Lab: 18% of respondents said they used materials from the STEM Library Lab to work on their project (up 5% from last year!)
- ▶ Impact on Future Career in STEM: 60% indicated that as a result of their participation in GNOSEF, they had an increased interest in pursuing a career in STEM. 35% 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. 68% 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 (25%). The next most difficult aspects included collecting data (22%) and analyzing data (17%).

GNOSEF Assessment – Student Survey Comments

- It was very fun. The judges' advice were extremely helpful on what I can do in the future. It was a pleasure to talk with other scientists.
- I really enjoyed presenting my project to judges because it broadened my view on how I can make improvements. I also enjoyed listening to the positive feedback because it made me feel happy I pursed this project despite its complexity.
- lt was fun! I had a great time, I've never really looked at STEM as a career, but this really made me want to learn more.
- Through science fair, I was able to learn more about marine macroalgae. I hope to pursue a career in the medical field now more than ever.
- I think it is a great opportunity to learn the scientific method and processes; however talking to experts is the most practical form of learning.
- I really like the judges and how there was people that are very knowledgeable of their topics. My favorite judge would most likely be the Coast Guard judge because he truly help me with my project and helped me highlight different parts of my project that are impressive.
- Very well put together! A great experience that will boosts a person's confidence in STEM.
- The judges are super inclusive.
- Science Fair gives me much better social skills and helps me gain so much more knowledge.

GNOSEF Assessment – Teacher Survey

- ▶ 11 respondents out of 23 teachers
- ▶ First time at the GNOSEF 10%
- Reported years participated in GNOSEF: 2-4 yrs (38%), 5-8 yrs (38%), 10+ (25%)
- ▶ 50% met with a GNOSEF mentor
- 100% thought students' projects were fairly judged
- **▶** Comments
 - GNOSEF personnel is very thorough and well-organized
 - I was very pleased with the feedback I received from students, and was thrilled with the number of judges this year. Kudos to those who worked so hard to find judges to participate in the fair.
 - ▶ The students trust the judges' experience and capability.

Question	Rating (Mean, Scale of 5)
Your experience of registering projects, receiving feedback, and finalizing registration via BOX.	4.11
The general communications you received from GNOSEF staff regarding fair logistics (parking, schedule, project setup and takedown, awards)	4.22
Your experience with Safety Check and project setup.	4.44

GNOSEF Assessment – Judge Survey

- 10 respondents out of 118 judges
- First time as a judge 70%.
- 67% are interested in being a mentor
- 100% are interested in judging in the future
- Organizations
 - Tulane University (23)
 - Ochsner Health System (15)
 - LSU Health Sciences and Entergy (6 each)
 - U.S. Dept. of Agriculture (5)
 - SPAWAR New Orleans and University of New Orleans (4 each)
 - Chevron, Sewerage & Water Board of NOLA, and University of Southern MS (3 each)

Question	Rating (Mean, Scale of 5)
Your experience in judging the student projects prior to live judging.	3.8
Your experience in the judging process.	4.8
The communication you received from GNOSEF staff regarding fair logistics	4.8

GNOSEF Assessment – Judge Survey Comments

- Being provided the project files prior to live judging allows for better evaluation and interaction with the students the day of the fair. Information provided by the fair coordinators allows for a better experience the day of the fair. The handling of the parking issue caused by construction activities was handled very well and communicated in a timely manner.
- ▶ I felt like all the communication was super clear and helpful. It was easy to access the judging materials and understand the projects beforehand. I had the best time getting to hear the kids present their projects, and I felt like the training beforehand was really helpful.

Ann Wills Public Relations Activity Report – Television

TELEVISION:

WVUE FOX 8 (FOX) "Nola Now" (Total Viewership: @45,605) - Friday, Feb. 23

Dr. Michelle Sanchez and Matthew Enos of Patrick F. Taylor Academy.

https://www.fox8live.com/video/2024/02/23/matthew-enos-greater-new-orleans-science-engineering-fair/

https://www.nolanow.com/video-gallery/community/science-fridays/





Ann Wills Public Relations Activity Report – Print/Online

PRINT/ONLINE:

Nola.com/New Orleans Advocate - 3/13/24 (Daily Circulation: 100,000/Sundays: 339,000) GNOSEF Grand Award Winners announced in the Community News Section

https://www.nola.com/news/communities/crescent_city/science-and-engineering-fair-announces-winners/article_d304deaa-e18b-11ee-a633-ff16b66deb73.html

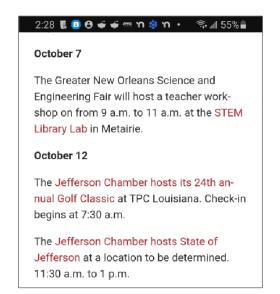


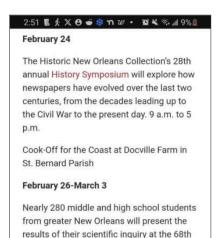


Ann Wills Public Relations Activity Report - Print/Online

Biz New Orleans - 2/5/24 - Teacher Workshop (8/25/23) and GNOSEF (2/26-3/3/24) (Link unavailable; ran repeatedly though day of event)







annual Greater New Orleans Science and

Bernick Center.

Engineering Fair at Tulane University's Lavin-

Tulane University - Feb. 2024

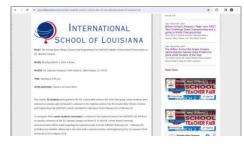
https://events.tulane.edu/content/greater-new-orleans-science-and-engineering-fair



International School of Louisiana (ISL)

https://www.gnocollaborative.com/monday-students-excel-in-science-fair-at-international-school-of-

louisiana-isl/



NolaNewswire

https://nolanewswire.com/education/annual-greater-new-orleans-science-and-engineering-fair-to-b presented-feb-26-mar-3-at-tulane/



Ann Wills Public Relations Activity Report – Print/Online and Radio

M S Benbow and Associates

https://www.linkedin.com/posts/msbenbow_gnosef-stem-wearemsb-activity-7167882249261043712-oGQh/

Science Buddies (event listing)

https://www.sciencebuddies.org/science-fair-projects/science-fair/science-fair-directory

RADIO:

WBOK 1230 AM Talk Radio (New Orleans, LA) - February 21, 2-24

https://drive.google.com/file/d/1E4kFkLOKoTqUK9POoQMOZPlcQ5wlaHp7/view?usp=sharing





Social Media

SOCIAL MEDIA REACH: 2/1/24 - 3/3/24

Below are the analytics for the GNOSEF campaign. Overall, the numbers were good and had a decent reach for such a niche event. Specific examples of people using the #GNOSEF tag can be found on Twitter/Instagram however the systems don't allow for an accurate total number.

We did not do any promoted posts, but we can always look at that moving forward. Instagram and Twitter are still the primary socal mediums used. Notable new followers and successful posts are also below. Profile updates were made for this new year. Photo Groups were the top posts for the year.

The days of the events were (expectedly) the most active so anything we can do outside of those days in the future will certainly help build or continue the buzz. Seniors were especially engaged this year, likely due to many Juniors not having access to their phones while on the Fair floor.

Instagram

Accounts Reached: 667 (+400 Non-followers)

Profile Visits: 319

Followers: 255

Posts: +40 Stories: +6

Following: 1,464 (+41)





Social Media

Facebook

Post Reach: 1,990

Post Engagement: 674

New Page Likes: +6

New Followers: +19 (Total: 175)

Reactions: +37 (Total: 194) Comments: +46 (Total: 70)

Twitter

Tweets: 68

Impressions: 4,052

Profile Visits: 436

Mentions: 11

Followers: 1,179 (Increase +25) Following 1,626 (Increase +153)







GNOSEF, Inc. EXPENSES AND INCOME						
		<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	
EXPENSES						
§ Teacher Resources – Workshops a	nd Mentoring Program	\$16,302	\$14,500	\$17,626	\$15,735	
§ Awards						
Students	Category Cash					
Awards		\$4,205	\$4,205	\$4,168	\$3,365	
	Scholarships by Donors	\$10,500	\$10,500	\$12,500	\$10,500	
	Dedicated Student Awards	\$450	\$450	\$650	\$650	
Teacher Recognition	GNOSEF Jr. Div. Teacher					
Awards		\$1,000	\$1,000	\$1,000	\$800	
Dedicated Teacher Av	vards (DeLaHoussaye Mentor/STAR/BJHeim/ASCE)	\$2,650	\$3,150	\$3,150	\$3,350	
 Patrick F. Taylor and Tom/Jean Brett S 	chool Grants	\$10,000	\$15,000	\$17,500	\$17,500	
Medals and Plaques		\$1,037	\$949	\$1,188	\$1,446	
 Social Media and Survey Contest Prizes 		\$326	\$282	\$43	\$201	
	SUB-TOTAL	\$30,168	\$35,536	\$40,198	\$37,812	
§ Operating Expenses						
 STEM Library Lab Membership (replace 	s Mini-Grants)	\$2,231	\$2,000	\$2,000	\$2,000	
 Assessment Survey and Analysis 		\$200				
 Food - Judges and Volunteers and Teach 	cher Workshops at Fair	\$0	\$0	\$6,841	\$5,893	
• Facility Costs	\$0	\$0	\$0	\$462		
	Pipe&Drape	\$0	\$0	\$1,738	\$1,738	
 Public Relations - Ann Wills 		\$4,050	\$4,230	\$4,905	\$4,530	
 Supplies (t-shirts/signage/photography 	expenses/postage/etc.)	\$236	\$932	\$1,435	\$1,159	
 Operating Costs (fair affl., SoS, tax pre 	p.,insurance)	\$3,900	\$5,070	\$5,142	\$4,760	
 Technical Support / Management for fa 	ir	\$3,500	\$2,500	\$2,500	\$2,500	
	SUB-TOTAL	\$14,117	\$14,732	\$24,561	\$23,041	
§ International - Registration, travel	, housing, food, misc.	\$901	\$14,493	\$14,755	\$16,439	
	TOTAL EXPENSES	\$61,488	\$79,261	\$97,140	\$93,027	
 Unrestricted Donations 		\$58,545	\$45,400	\$44,820	\$51,090	
Paypal Teacher Deposits				\$1,043	\$671	
Brown Foundation Grant	\$14,951	\$10,000	\$10,000	\$10,000		
Bruce J. Heim Foundation Grant			\$3,000			
ISEF Equitable Access Grant		\$7,000	\$10,000			
Reclaimed Amazon Gift Cards	\$535	\$733	\$633			
 Dedicated Awards (Incl. pledged as sch 	\$25,081	\$30,100	\$35,800	\$32,000		
	TOTAL INCOME (includes pledged awards)	\$99,112	\$93,233	\$105,296	\$93,090	

GNOSEF Status	5/31/2024	
Regions Bank	Checking Account	\$204,413.90
	Card Account	\$5,000.00
Captial One Account Balance	Escrow Account	\$18,035.79
	Card Account	\$4684.88
Schwab Account		\$10,981.94
PayPal Account		\$6428.60
Tulane K-12 STEM Account	\$14,473.29	
Remaining Anticipated Funds & Award I	\$2,200	
Committed Scholarship and School Awa	-\$62,681.77	
Remaining Estimated Expenditures	-\$19,050.50	
(incl. checks , ISEF Hotels, I	June Workshop, etc.)	
Total Unrestricte	ed Funds Available	\$184,486.13

Financial Status

GNOSEF Wish List

- Increase the GNOSEF ISEF delegation funding (\$18,850 Total)
 - Previously budgeted 4 Senior Division Grand Award winners, 2 teachers, 1 "Adult-In-Charge", and a 5th student in case of a team project (\$16,750)
 - Add Judge Advisor, Scientific Review Committee Chair, or another teacher/student
 - Because of the impact on participating teachers, we would like to send all 4 teachers of the Grand Award winners, if eligible. Since we have been successful with 1 teacher serving as "Adult in Charge", this only adds 1 more to the current budget.
- Paid Bookkeeper (~\$500 setup and ~\$1075 annual including QuickBooks license), and Executive Director position (to evolve, we need to start thinking about this!)
- Recruiting and onboarding new schools and teachers (increase mentor budget by \$5k)
- ▶ Transportation grants to fund buses to the GNOSEF (\$4-\$5k)

GNOSEF, Inc. EXPENSES with PROPOSED BUDGET for 2025								
			APPROVED 2024	ACTUAL 2024	PROPOSED 2025			
EXPENSES								
§ Teacher Resources – Workshops and Mentoring Program		\$18,274	\$15,735	\$20,875				
§ Awards								
• Students	nts Category Cash			+2.265	±4.600			
Awards			\$4,600	\$3,365	\$4,600			
	Dedicated* Scholarships by Donors		\$12,500	\$10,500	\$10,500			
		cated* Student Awards	·	\$650	\$650			
Teacher Recognition GNOSEF		acher Awards	\$1,000	\$800	\$1,000			
Dedicated* Teacher Awards (DeLaHoussaye Mentor/STAR/BJHeim/ASCE)			\$3,150	\$3,350	\$3,350			
• Patrick F. Taylor/Tom&Jean Brett School Grants - dedicated*			\$17,500	\$17,500	\$17,500			
Medals and Plaques			\$1,200	\$1,446	\$1,500			
 Social Media and Survey Contest Priz 	es		\$300	\$201	\$300			
		Sub-Total	\$40,900	\$37,812	\$39,400			
§ Operating Expenses								
• STEM Library Lab Membership (repla	ces Mini-Grants)		\$2,000	\$2,000	Teach. Res.			
Food - Judges and Volunteers and Teacher Workshops at Fair			\$7,600	\$5,893	\$6,000			
Facility Costs Rental (includes tables and chairs, cleaning fees))			\$3,000	\$462	\$1,000			
		Pipe&Drape	\$2,000	\$1,738	\$2,000			
• Public Relations - Ann Wills			\$5,200	\$4,530	\$5,000			
Supplies (t-shirts/signage/photography expenses/postage/etc.)			\$1,000	\$1,159	\$1,2500			
Operating Costs (ISEF affl., Sec. of State, tax prep; insurance)			\$5,200	\$4,760	\$5,000			
Technical Support / Management for Fair (ISEF Equitable Grant)			\$2,500	\$2,500	\$2,500			
Bookkeeping Support			\$1,575	\$0	\$1,575			
		Sub-Total	\$30,075	\$23,041	\$24,325			
§ International - Registration, travel, h	ousing, food, misc.	Sub-Total	\$16,750	\$16,439	\$18,850			
		TOTAL EXPENSES	\$105,999	\$93,027	\$103,450			
*Dedicated Awards (if offered by donor) Grants (Brown)					\$52,875			
					+=0 ===			

2025 Budget Proposal

Board Business

- 2024-25 Budget Proposal
- Proposed Regions Bank Certificate of Deposit and Money Market Account (with signature authority for Michelle Sanchez, Fair Director, and Annette Oertling, President)
 - CD 5% 10-month (\$75k)
 - ▶ Money Market 3% (~\$70k)
- Nomination of 2024-25 Board Officers
 - President Annette Oertling
 - Secretary Danielle Scanlon
 - ▶ Treasurer Lorraine McGinley
- Nomination of a new Board Member Mary Hermann

GNOSEF Strengths

- 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 also includes experienced "Teacher Mentors" and graduate student mentors for student participants
- Highly Qualified Judges
- Dedicated Fair Volunteers and Planning Committee

2024-2025 GNOSEF Calendar

- August 24 Teacher Workshop and Kickoff
- October 1 School Affiliation Forms Due
- October 5 Teacher Workshop
- October 11 Submit Project for Prior Approval to SRC
- December 4 All Prior Approval Paperwork SRC Requested Revisions Must be Completed
- January 10 Project Registration/Document Submission Deadline
- January 29 All Project Paperwork with SRC Requested Revisions Must be Completed
- ▶ February 3 All Judge Review Documents are Due
- ► February 17-24 GREATER NEW ORLEANS SCIENCE AND ENGINEERING FAIR
- ► TBD Registration Deadline for State Fair
- TBD Louisiana Science and Engineering Fair (LSEF)
- May 10-16 International Science and Engineering Fair (ISEF), Columbus, OH