COLLABORATIVE FOR STEM EDUCATION & OUTREACH

Interdisciplinary Science and Research Program

ANNUAL REPORT 2024-25

This year the ISR program unveiled a new logo intended to unify the three programs under one logo that represents all of the schools. Each of the three circles surrounding the core ISR are the primary color of the three ISR schools: Overton red, Stratford orange, and Hillsboro green. The Vanderbilt partnership is reflected through the gold color of the ISR logo.

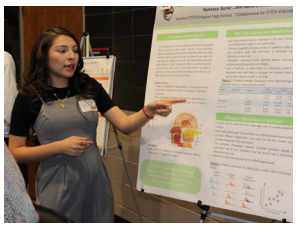
Interdisciplinary Science and Research Program Overview

The Interdisciplinary Science and Research (ISR) Program is a partnership between the Vanderbilt Collaborative for STEM Education and Outreach and Metropolitan Nashville Public Schools. The program aims to enhance students' understandings of STEM concepts and research principles while empowering teachers through scientific research.

ISR is currently available at three Metro Nashville high schools: Stratford STEM Magnet High School, Hillsboro High School, and John Overton High School. All ISR courses are **co-taught by a Metro Public schools teacher and a Vanderbilt scientist**, with a focus on providing individualized instruction to meet student needs. The ISR curriculum is designed to guide students from exploring science topics of interest to investigating how these scientific topics work. As students advance, ISR provides them with opportunities to share their ideas with broader scientific and community audiences.

ISR offers a collection of unique opportunities for students, such as dual enrollment with Tennessee Tech University and **multiple summer internship experiences**.

Since it began in 2010, **over 700 students** have participated in the ISR program. The Interdisciplinary Science and Research Program is elevating both the teaching and learning of STEM—preparing students to solve 21st century problems, and be critical thinkers and leaders.



2024-25 BY THE NUMBERS

256
STUDENTS

29
GRADUATES

56
STUDENTS
participated in summer internships, including the REHSS & SHIRE programs

76
INDUSTRY CERTIFICATES
completed by students

44
STUDENTS
earned dual enrollment credit through Tennessee Tech

29+
FIELD TRIPS & JOB SHADOWS

27
STUDENTS
recognized as Tennessee Ready Graduates

$51k+
GRANT FUNDING
awarded to teachers, fellows & students

37
STUDENTS
presented research at local science events with

21
AWARD WINNERS

Our ISR Team

COLLABORATIVE FOR STEM EDUCATION AND OUTREACH

Angela Eeds, Ph.D.
Executive Director

Amanda Dixon, M. Ed.
Assistant Director

Nathaniel Freymeyer, Ph.D.
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STEM Student Research

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ISR Scientist
John Overton High School

Nicolas Means, Ph.D.
ISR Scientist
Hillsboro High School

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ISR Scientist
Stratford STEM Magnet School

METRO NASHVILLE PUBLIC SCHOOLS

Will Haynes, M. Sci.
ISR Teacher
Hillsboro High School

Jesi Seifert, M. Sci.
ISR Teacher
Stratford STEM Magnet School

Gregory Smith, Ph.D.
ISR Teacher
John Overton High School

Joshua Swartz, Ph.D.
ISR Teacher
Hillsboro High School

*Select headshots are provided courtesy of The Ayin Project

2024-25 Program Highlights

Students Attend MTSEF

Twenty five students attended the Middle Tennessee Science and Engineering Fair last March at Belmont University– the first time all three ISR schools were represented at the fair. They presented their research projects for judges and brought home ten category awards. Several additional students earned special award recognition and brought home over $2,000 in cash prizes.

> "The process was difficult, but the outcome was worth it. It will all be worth it in the end."
>
> —Kayleigh, Class of 2025, on presenting at MTSEF

> "I've gained presentation skills. It comes so much more naturally to me now. I've also learned flexibility because I've had to adjust so much of my project."
>
> —Willa, Class of 2025

Collaborative Learning

- In the fall of 2024, ISR students from all three schools gathered at the Vanderbilt Collaborative for STEM Education and Outreach for the inaugural ISR Kickoff. Together with their teachers and Vanderbilt teaching fellows, seniors discussed ideas for their final research projects and provided constructive feedback on the ISR program. The sophomores and juniors learned about the summer opportunities provided to them as part of the ISR program. Freshmen had an opportunity to learn about skills useful to them in the ISR experience. All students had an opportunity to meet their fellow students and reconnect with friends from REHSS and SHIRE.
- In the spring, ISR sophomores, juniors, and seniors gathered for the annual ISR Symposium hosted by John Overton High School. The day began with a poster session, welcome from the CSEO, and time to recognize the ISR seniors for their accomplishments in the program. The seniors then shared their independent research projects with the larger ISR program through oral presentations.
- Students from Overton and Hillsboro High Schools joined together at Overton with a representative from Life Science Tennessee to discuss strategies to promote the value of STEM education in Nashville. During the conversation, students developed new ideas to market the value of their ISR experiences and discussed a rough action plan to communicate their perspectives to local policymakers.
- ISR and SSMV students from across MNPS were invited to participate together in an exciting job shadow experience with the Animal Research & Education Awareness (AREA) program at the American Association of Lab Animal Science Annual Meeting in November. They learned about the ethics and logistics of using animals in research, the drug development process, and related careers. Much swag from the various companies on the Exhibition Hall Expedition was brought home!

> "I learned a lot about overcoming obstacles in order to get the things I wanted. For example, throughout my project when there were things I didn't fully understand, I learned how to ask questions."
>
> —George, Class of 2025

Alumni Testimonials

"The senior project has really prepared me for college. During this spring semester, I worked on and designed an honor's physics project with my professor. This class was very influential for me as I was writing this, and I am thankful for the preparation."

—Chelsea, Class of 2024

"The [ISR] program had a huge lasting impact on me and the way I think. The program is much of the reason I found my interest in research/discovery and why I ultimately chose to study biochemistry and pursue grad school."

—Tony, Class of 2019

"I can't ever put into words how thankful I am for ISR and our teacher's passion for teaching science. Comparing my knowledge from ISR to what I am seeing right now in college is so mind blowing, and I keep getting reminded how outstanding the ISR program is."

—Alex, Class of 2024

"I also just wanted to take the time to thank you once again for all the hard work you put into teaching us how to read, write, research, and present because it has led to many fantastic grades and compliments from professors, and has frankly saved my life many times over the last year or two. In the moment I struggled a lot to excel in your class but now I frequently use all of the things you taught us inside and outside of the classroom and wonder where I'd be without that knowledge. It's not uncommon for me to write or research something for a class and think, I'm glad I learned that in ISR."

—Nicholas, Class of 2023

Community Partners

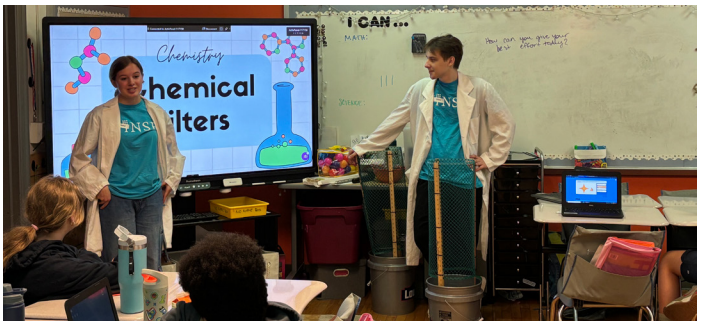
In addition to Vanderbilt University and Peabody College, many community partners and organizations contribute each year to the success of the ISR program by providing field trip sites, transportation, supplies, and additional support. ISR partners include:


VANDERBILT UNIVERSITY
VINSE
VANDERBILT INSTITUTE OF NANOSCALE SCIENCE AND ENGINEERING

Hillsboro High School

Seniors Give Back to 5th Graders

This spring, our seniors demonstrated their ability to communicate their independent research projects in an accessible and engaging format for 5th graders at Waverly Belmont Elementary. The challenge required seniors to make their research relatable by creating age-appropriate analogies and hands-on activities. Some ideas included scavenger hunts, building candy molecules, and throwing different types of water balloons that could break under different pressures, all while relating back to why these activities are important in research. Our seniors strengthened their communication skills but also inspired younger students with a fun science experience. This served as a capstone to their own journeys as they all were preparing for the next steps beyond high school.

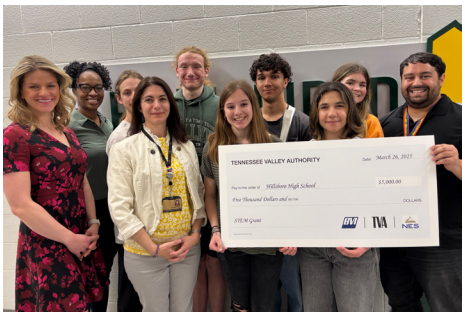


VISIBL 2025, Class of 2028

5 freshmen, including Margaret Liggett, Elliot John, Athena Johnston, Marichor Piol and Revelation Rowe were nominated and accepted into the VISIBL program at Belmont this summer, where they focused on making billions of microscopic organisms visible to the eye.

Grant, Grants, Grants

The junior class of Hillsboro submitted a Samsung Solve for Tomorrow project to address light pollution within Nashville. The $2,500 grant was awarded to the group who was one of the six State finalists in Tennessee. The junior class of Hillsboro and Maranda Clark (a senior) developed a proposal for the Tennessee Valley Authority grant competition, securing $5,000 to bring their ideas of STEM outreach to Hillsboro and fund the beginning of an outdoor classroom project. Dr. Means and Dr. Swartz submitted a proposal to the Society for Science STEM Research Grant competition, securing $5,000 to bring new equipment into the ISR classroom, including a –80C freezer and autoclave for both summer programs and senior projects.



Collaborations, Projects, and Field Trips

- NanoDay at Vanderbilt Institute of Nanoscale Science and Engineering (VINSE)
- Metro Water Tours
- Oak Ridge Laboratory
- Tennessee Bureau of Investigation Facility Tour
- Smoakstack Music Recording Studio Tour
- Pfizer AREA conference

ISR Teacher and Fellow Accomplishments

- Dr. Joshua Swartz was nominated for 2024 Academies of Nashville Innovator Award.
- Dr. Swartz was a presenter for Society for Science Research Teacher's Conference.
- Dr. Nicolas Means submitted a National Science Foundation Fellowship to increase cancer biology education in ISR.
- Mr. Will Haynes joined the ISR Hillsboro team to teach IS-I.

Senior Highlights

Our senior group was an outstanding representation of ISR at Hillsboro. Combined, they communicated in **18** science presentations with **9** unique awards and earned **over $1500** in grants/ awards, all while keeping a welcoming and fun environment every day in class.

LIAM CHAPMAN, CLASS OF 2025

"Investigation of reaction thermodynamics between carbanion and carbon dioxide for carbon capture"

Hillsboro Valedictorian • MTSEF Presentation (2nd place award in computer science) • VINSE Nanoday Presenter

Attending Colgate University in Fall 2025

LILLIE CATE ALLEN, CLASS OF 2025

"Casting Polyvinylidene Difluoride on Graphene for Nanoscale Filtration Systems"

Hillsboro Salutatorian • TJSHS and TJAS Presentations • MTSEF Presentation (1st Place Chemistry, 1st Place Chemours Society, 1st place American Chemical Society) • VINSE Nanoday 3rd Place Poster Award

Attending Clemson University in Fall 2025 on the Out of State Merit Scholarship

RANA HAIDOUS, CLASS OF 2025

"Confirming Bioactive Molecule Function from Machine Learning Guided Discovery"

MTSEF Presentation (2nd Place Biochemistry)

Attending Wake Forest University in Fall 2025 on a Full-Ride Scholarship

A New Unit: Bacteriology and Bacterial Identification

In 2025, the Bacteriology unit was incorporated into the Human Health and Disease unit of the sophomore curriculum. Students developed independence in working with bacteria, including how to handle, grow, and test, while figuring out how to develop the best experiment plan to identify their unknown bacteria.


Aug
Octo
Mfumfu


CR3W

John Overton High School

New Partnership between John Overton High School and the Nashville Zoo

The Nashville Zoo kicked off an official partnership with the entire Overton cluster and launched a program called Wildlife Research Scholars. At the high school level, ISR students will be the primary face of this new collaboration – including opportunities for student research projects, summer internships, and a free week at the Nashville Zoo Summer Camp for up to 10 students.

As an exciting first step, Dr. Smith was invited to learn about Conservation efforts in Zimbabwe with members of the Nashville Zoo and MNPS STEAM office. MNPS and Zoo educators connected live through a virtual call with >4,000 students in the Overton cluster via 5 calls over 3 days. Students heard from conservationists working at Chipangali Wildlife Orphanage and met virtually with native Zimbabwean wildlife including servals, snakes, hedgehogs, and hyenas.

Dr. Smith was able to go back to his paleontology research routes by sampling fossils at the Natural History Museum of Bulawayo. He collected nearly 100 microwear molds of various carnivore species, including lions, leopards, and cheetahs. These molds will be studied by ISR students to determine the dietary habits of carnivores in southern Africa.

Going forward, Dr. Smith and staff from the Nashville Zoo and Chipangali are hoping to bring a team of students back to Zimbabwe for a service-learning field experience. Students would learn firsthand about conservation efforts in southern Africa and have a chance to give back to the local community with a hands-on learning project.

Grants

Awarding Agency	Purpose	Grant
Cul2Vate	Build community garden at Overton	$5,000
Pets in the Classroom	Purchase fish for classroom fish tank	$125
Society for Science (SFS)	Purchase laboratory and field equipment related to Environmental Studies field projects and Sustainability	$5,000
Tennessee Valley Authority (TVA)	Purchase laboratory and field equipment related to the Environmental Toxicology Unit	$5,000
Toshiba America Foundation	Purchase infrared (IR) spectrometer to support chemistry curricula and research	$11,500

Collaborations, Projects, and Field Trips

- Seniors in ISR volunteered at STEAM Day at the Nashville Zoo. They taught visiting students about water quality and learned about how the zoo is involved in preserving the endangered Nashville crayfish *(Faxonius shoupi)*.
- The ISR program has launched a new partnership with Cul2vate, bringing fresh opportunities for hands-on learning and community impact. In Spring 2025, Cul2vate installed brand-new garden beds and planted our first round of crops in the community garden. The garden will be a launching point for ISR senior projects and service opportunities in partnership with Overton clubs.
- IS-I students teamed up with the Bobcat Players (theatre program) to build the set for the Spring Musical, Hadestown. Students learned the basics of set design and engineering, using power tools to blend science and art while contributing to the upcoming production. The collaboration occurred as part of the Survivor unit, as students learned how STEM skills could help them survive the apocalypse.
- Other field trips this year included: Vanderbilt Institute of Nanoscale Science and Engineering, The Hermitage, Vanderbilt Center for Addiction Research, Metro Water Treatment Plants, Tennessee Aquarium, and Nashville Zoo

ISR Teacher and Fellow Accomplishments

- Dr. Smith was selected as the sole classroom teacher from the Overton cluster to attend a trip to Chipangali Wildlife Orphanage in Zimbabwe in May 2025.
- Academy MVP for the Academy of Interdisciplinary Research for 2024-2025 school year – Dr. Gregory Smith
- Dr. Ryan Bowen successfully initiated a partnership between the Vanderbilt Ethnobotanical Garden and John Overton High School

Student Accomplishments and Presentations

ABRAM SHEA

"Block-like Membranes by scROMP for Polar Solvent Dehydration"

Published in *Young Scientist* • Presented at VINSE NanoDay and TJAS

MAILEE SRILOUANGKHOL

"Thermo-responsive Hydrogels Characterized in Cooling-Triggered Release and Transmittance"

Earned 2nd place in Engineering: Materials and Bioengineering division at MTSEF • Presented at VINSE NanoDay and TJAS

ASHLEY AGUILAR

"The effects of *Bacillus megaterium* on cleaning agents"

Received a TJAS grant to conduct her research • Won 2nd place in Microbiology division at MTSEF • Presented at TJAS

JOY TEALL

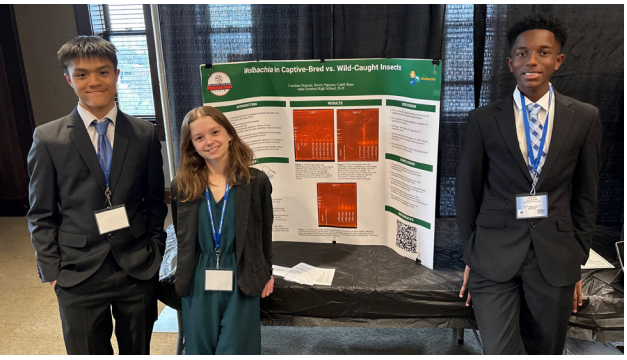
Received full ride to Vanderbilt as part of University MNPS

CAROLINE DUNCAN, KEVIN NGUYEN & CALEB RUSS

"*Wolbachia* in Captive-Bred vs. Wild-Caught Insects"

Won 3rd place in Microbiology division at MTSEF

John Overton High School




STEM HERO


17

Stratford STEM Magnet School

ISR Seniors Willa Sands and Isioma Ikhile awarded Valedictorian and Salutatorian

Willa Sands and Isioma Ikhile received top academic honors as the Valedictorian and Salutatorian, respectively. Beyond their academic achievements, both students were deeply involved in the Stratford community supporting the marching band, cross-country team, track team, wrestling team, library, and cultural clubs to name a few. Read more about Willa and Isioma's senior research projects, awards, and future steps on the following page.

Grants

Helping to fund the Spartan Beehives and other ISR initiatives, Stratford ISR received over $9,000 in grant awards this year, including:

Awarding Agency	Purpose	Grant
Centennial Park Conservancy Nashville Earth Day Environmental Grants	Installation of a pocket prairie on SSMS campus	$2,000
Tennessee Valley Authority/ Bicentennial Volunteers, Inc.	Spartan Hives Honey Extraction; Altering Visual and Spatial Perception	$5,000
Inglewood Neighborhood Association Grant	Fluorescence Microscopy Equipment	$650
The Bee Cause Project 2025 Bee Grant	Expanding the Spartan Hives	$1,500

Collaborations, Projects, and Field Trips

- Shelby Park & Sevier Lake: Stratford ISR students concluded a longitudinal water quality study with Nashville Metro Water services to investigate the connection between pet waste and fecal bacteria in the waterways. Educational signs designed by the students were printed by Metro Water and displayed at the dog park for community outreach.
- Expansion of Spartan Hives: With the support of multiple grants and capturing free bees using a swarm trap built at a Nashville Area Beekeepers Association workshop, the Spartan Hives has expanded from two to FIVE hives!
- Other field trips this year included: Coon Creek, Beaman Park, Shelby Park Nature Center, Metro Water Services facilities, and Harrison Bay State Park

ISR Teacher and Fellow Accomplishments

- Ms. Jesi Seifert traveled to Baja California to study marine biology as a recipient of the Ecology Projects International Teaching Fellowship.
- Ms. Seifert was named the 2025 Academies of Nashville Partner Choice Academy Champion of the Year.
- Ms. Seifert was invited to be a panelist at the USGS Karst Conference on Increasing Minority Participation in the Geosciences held at Tennessee State University.
- Dr. Natalie Wallace served as Director for the 2025 Summer High-school Internships in Research Experiences (SHIRE) program overseeing its expansion from 18 to 42 interns.

Student Accomplishments and Presentations

FENICIA CRAWFORD

Fenicia will attend Vanderbilt in Fall 2025 on a full ride Questbridge Scholarship.

"Exploring the Impact of Visual vs. Verbal Instruction on Memory Retention of Dance Choreography in Teenagers" – ISR Senior Capstone Project

JADEN CHAMBERS

Jaden was accepted to the Cancer Research Program for Rising Juniors organized by the Meharry-Vanderbilt-TSU Cancer Partnership.

HENRY CERVANTES-CRUZ

"Water Quality Assessment in Metro Schools: Detecting Contaminants" – MTSEF & TJAS presentation

Awards: 3rd-Chemours Chemistry Award; U.S. Stockholm Junior Water Prize

Attending Belmont University Fall 2025 on a full ride Bell Tower Scholarship

NEVAEH GARDNER

"Effects of Thermal Protection on Different Hair Types" – MTSEF presentation

Awards: 2nd-MTSEF Chemistry; 2nd-Chemours Chemistry Award

Attending University of Tennessee Chattanooga Fall 2025

MAKAI GREER

"Testing the Effects of β-alanine on Ants' Productivity" – MTSEF presentation

Awards: 3rd-MTSEF Animal Behavior

Attending Middle Tennessee State University Fall 2025 with BLAZE & HOPE Scholarships

WILLA SANDS

"The Effects of Restoring a Native Grassland Ecosystem at Stratford STEM Magnet High School" – MTSEF, TJSHS, & TJAS presentation

Awards: 1st-MTSEF Environmental Sciences; Ricoh Sustainable Development Award

Attending University of Tennessee Knoxville Fall 2025 with UTK Merit & HOPE Scholarships

GEORGE UTLEY

"Analyzing Air Quality in Different School Environments" – MTSEF & TJAS presentation

Awards: United States Air Force Award

Attending University of Tennessee Knoxville Fall 2025 with the HOPE Scholarship

ISIOMA IKHILE

"Understanding the Role of RSK in the Immune System in Biology and Cancer" – MTSEF & TJAS presentation

Attending Harvard University Fall 2025 on a full ride Gates Scholarship

ANNA GUTZMIRTL

"Influence of Music on Stress Levels in High School" – MTSEF presentation

Attending University of Tennessee Chattanooga Fall 2025 with the HOPE Scholarship

KAYLEIGH HOOPER

"The Effect of Auditory Stimulation on Timed Math Tests" – MTSEF presentation

Attending Austin Peay State University Fall 2025 with the HOPE Scholarship

DOMINIC RIVERA REYES

"Antimicrobial Properties of Local Honey, Manuka Honey, and Blended Honey" – MTSEF presentation

Entering workforce post-graduation

JALEN WATTS

"Is the Marching Band Playing at Football Games Beneficial to the Football Team?" – MTSEF presentation

Attending Nashville State Community College Fall 2025

AURIANNA WOODS

"The Impact of Music Genres on Our Emotions" – MTSEF presentation

Attending Middle Tennessee State University Fall 2025 with the HOPE Scholarship

Spartan Hives harvests honey from the hives for the 1st time thanks to the hard work by our student beekeepers! This honey will be used for project-based learning units, research projects, and fundraising.

Summer Opportunities

Students in the ISR program have the opportunity to experience research-based internships during the summers leading into the junior and senior years. These programs offer MNPS course credit and allow the students to get additional experiences that cannot be offered in a traditional classroom setting.

SHIRE

In Summer 2024, the Interdisciplinary Science and Research Program launched the Summer High-school Internships in Research Experiences (SHIRE) program in partnership with the Ayin Project and the Nashville POWER Youth Summer Employment Initiative. This unique, paid internship offers rising juniors and seniors within the ISR programs the opportunity to engage in invaluable hands-on research, skill development, and communication activities. Students will work alongside scientists from Vanderbilt's Collaborative for STEM Education and Outreach and educators from their home ISR schools.

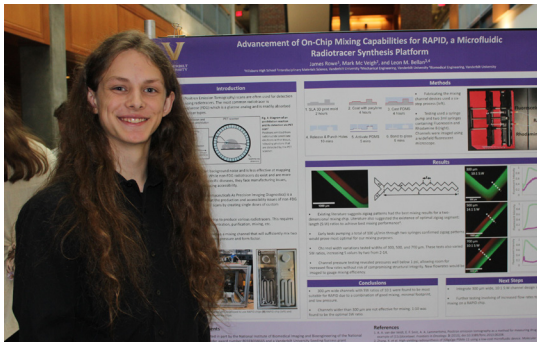
In the Summer of 2025, rising juniors delved into Cancer Biology and Sustainable Engineering, exploring techniques such as cell culturing and water quality analysis, respectively. Rising seniors developed individual research projects to continue during the fall semester at their home high schools. We also added a laboratory technician postion this summer for graduating seniors to gain mentor and leadership experience while supporting the facilitator team to help younger ISR peers. This internship not only provides a stipend but also offers the chance to work on personalized projects and gain real-world research experience while working with leading experts in the field.

"SHIRE has sparked my curiosity more than any other class and opened my eyes to new applications of science. The structured freedom of SHIRE has helped reduce stress while providing valuable connections, resume-building opportunities, class credit, and more."

—Pax, SHIRE Research Intern II, John Overton High School Class of 2026

"This was the first time that I was asked to be a regular mentor to younger peers; I enjoyed it. I am more confident in my science and research abilities because people are looking to me for answers."

—Lillie Cate, SHIRE Lab Technician, Hillsboro High School Class of 2025



REHSS

In the summer of 2025, ISR held the 13th year of the Research Experience for High School Students (REHSS) program with a cohort of 9 students representing all three ISR schools. Our students engaged in intense, 6-week scientific internships at Vanderbilt University, with project subjects ranging from pharmacology and neuroscience to computer science and chemical engineering. All students in the REHSS program are now preparing their research papers for the Regeneron Science Talent Search (STS) competition in November, as well as submitting to Vanderbilt's Young Scientist journal in December. New this year, ISR is partnering with Tennessee Tech to provide the students with a Dual Enrollment Credit!

> This year, **7** of the **10** students are alumni of the SHIRE program, most of which utilized the skills they acquired from SHIRE to directly contribute to their REHSS success.

The REHSS students partnered with the School for Science and Math at Vanderbilt for an annual symposium, where they showcased their summer projects. This year, Dr. Rachelle Johnson of the Vanderbilt University Medical Center was invited to speak to the students about her journey through science and give the students perspectives on where they are on their journey.

"SHIRE in my junior year developed the confidence to see myself as a scientist, and I do not know if I would have done REHSS without it. REHSS then finalized my convictions that I do want to be in a research lab, but I am still trying to figure out the exact field."

—Zaniya, John Overton High School Class of 2026

"I was able to really develop my skills in biology, such as learning techniques like CRISPR during SHIRE, which I then used more independently in my REHSS project. That was a cool feeling and I now think I want to pursue a career in microbiology when I go to college."

—Carzon, Hillsboro High School Class of 2026

Course Progression

	Content-Focused Courses	Research-Focused Courses
Explore **9th grade**	**Interdisciplinary Science I:** Students develop an understanding of the fundamental concepts essential to scientific inquiry.	
Investigate **10th grade**	**Interdisciplinary Science II:** In this accelerated, multidisciplinary course, students investigate real-world relevant research questions under major themes during each nine-week period.	**Research I:** Students develop an understanding of the fundamental concepts essential to scientific inquiry. Credit obtained through summer research internship.
Understand **11th grade**	**Interdisciplinary Science III* (ESS 1100: Introduction to Environmental Studies):** This course is a college-level introduction to the field of environmental studies requiring an understanding of diverse topics including biology, toxicology, sociology, and anthropology. Students will investigate environmental problems involving complex interconnections between people, ecosystems, and the biosphere.	**Research II* (ESS 1200: Environmental Research I):** In this introductory course, students are introduced to all aspects of research with particular emphasis on experimental design, statistics, ethics, writing and communication. Methodologies for observation, data collection, and analysis are explored in greater depth with a focus on cross-discipline application.
Communicate **12th grade**	**Interdisciplinary Science IV* (ESS 2200: Environmental Research II):** An intermediate-level course on conducting research in the environmental sciences and allied fields. Students will be paired with a research mentor and will conduct an undergraduate-level research project.	**Research III* (ESS 2300: Environmental Science Communication):** A course on developing oral and written scientific communication skills necessary to convey research findings in a variety of formats such as oral and poster presentations for conferences and manuscripts for scientific journals.

*These courses are eligible for dual-enrollment credit at Tennessee Tech University

Select Colleges & Universities

ISR Graduates Attend or Have Attended

Arizona State University · Austin Peay State University · Belmont University · BYU Brigham Young University · Clemson University · Dartmouth · Colgate University · University of Georgia · Harvard University · Loyola University Chicago · Middle Tennessee State University · Mississippi State University · Purdue University · Sewanee The University of the South · Tennessee State University · Tennessee Tech · Trevecca Nazarene University · UCLA · University of Massachusetts Amherst · University of Oregon · The University of Tennessee Chattanooga · The University of Tennessee Knoxville · Vanderbilt University · Wake Forest University · Xavier University of Louisiana

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The ISR program is made possible by the contributions of Metro Nashville Public Schools, Vanderbilt Peabody College, Regeneron, and generous donors to the Collaborative for STEM Education and Outreach. To donate, please visit:

vu.edu/supportISR