



## Landon Walls: Student of the Month

Every month of the school year, we select a STEM student in recognition of those who most reflect our core values of Passion, Diligence & Aptitude for STEM, while also demonstrating Collaboration with others.

Congratulations to Landon Walls, our STEM Origins Foundation May 2025 Student of the Month! Landon just completed grade 5 at A. Gary Walsingham Academy and was chosen from 37 outstanding candidates nominated by teachers across the Bay County School District. Landon received a STEM Origins medal, certificate and a gift card to Margaritaville Restaurant. We also presented Ms. Julie DeFelice, his dedicated and enthusiastic STEAM teacher, with a gift card to Carrabba's Italian Grill along with a copy of Landon's award to display in her classroom. We will select a STEM student each month of the school year in recognition of those who most reflect our core values of Passion,

Diligence, and Aptitude for STEM, while also demonstrating strong Collaboration with others. Below is the nomination written by Landon's teacher:

*Landon Walls exemplifies the core values of passion, diligence, aptitude, and collaboration in STEM at a level far beyond what is typical for his grade. His genuine curiosity and enthusiasm for science and technology shine both in and out of the classroom—whether he is eagerly tackling advanced math problems, exploring independent coding projects, or asking insightful questions that spark deeper discussions.*

*Landon demonstrates remarkable diligence, approaching challenges with persistence, focus, and a level of patience uncommon for his age. His strong aptitude for STEM is evident in his logical*

(continued on [page 2](#))

### In this issue:

Caterpillar Soup

Why is STEM Important?

Resources

Origin Story: NIHF

Scientists Freeze Light

Volunteer Profile

Upcoming Events

Fun(d) Raising News

About Us

---

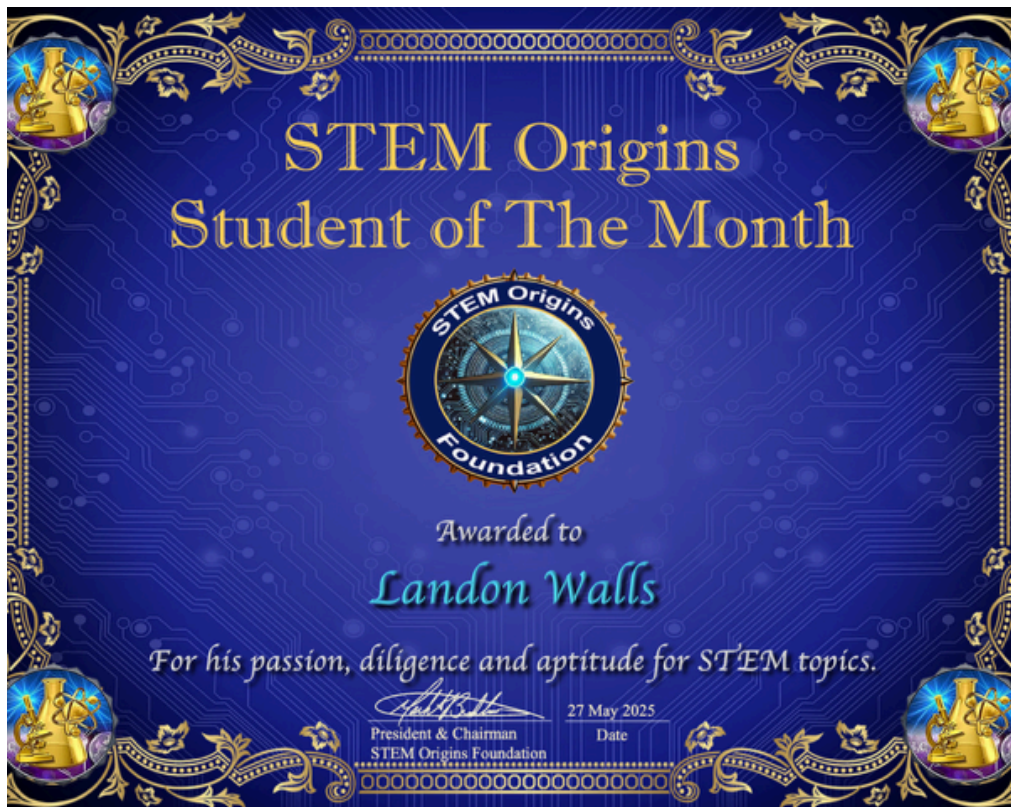
## Landon Walls (continued)

*thinking and his ability to solve complex problems with both precision and creativity. In addition, Landon is a natural collaborator—respectful, communicative, and a reliable team member who brings out the best in his peers and works seamlessly with faculty.*

*What truly sets him apart is his initiative and drive: Landon attends summer STEM camps at Gulf Coast State College and has participated for several years in enrichment classes and clubs at Walsingham, where STEM is deeply integrated into the curriculum. He is eager to learn, highly motivated, and dreams of becoming an inventor—goals he actively pursues with enthusiasm and purpose.*

*Landon is one of the most inquisitive and driven students I've had the pleasure to teach. He approaches every STEM challenge with excitement and determination, often going beyond the lesson to explore real-world applications on his own. His enthusiasm is contagious, and he inspires those around him to think more deeply and creatively. I have no doubt that Landon's passion and problem-solving mindset will lead him to make meaningful contributions to the world of innovation.*

—Julie DeFelice, (Landon's STEAM Teacher),  
A. Gary Walsingham Academy



## Caterpillar Soup?

A caterpillar turns into a butterfly through a process called metamorphosis. Inside the chrysalis, its body breaks down into a soup-like liquid. Special cells, called Imaginal discs, rebuild it into a butterfly with wings, eyes, and legs! Scientists think butterflies might even remember things from when they were caterpillars. It's like being born all over again. Nature is amazing!

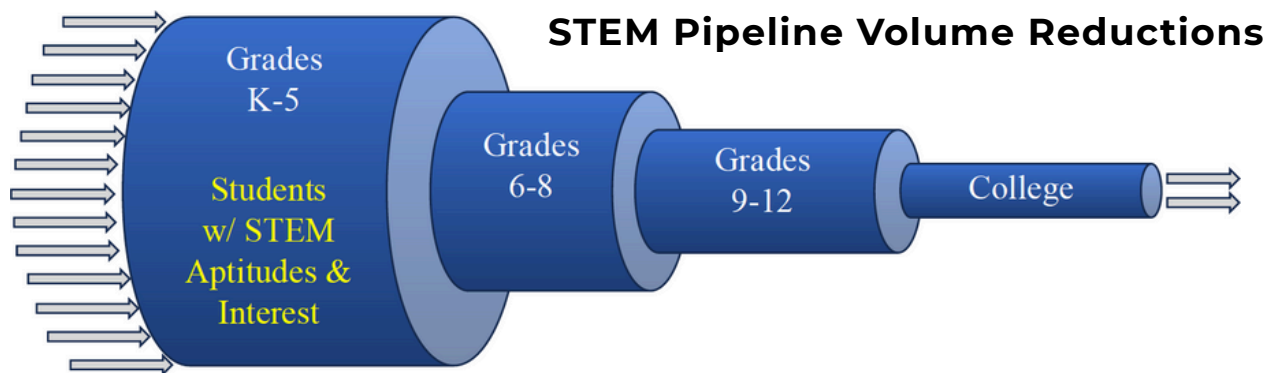
Attribution: –[Whispered Narratives](#)



---

# Why is STEM Important?

With every issue of Origins, we bring you an excerpt from our Strategy Plans to help you better understand the importance of STEM education. This issue, we look at the main thing that drives our efforts—the pipeline of STEM students who eventually pursue a STEM career. The image shows how, over time, more and more students stop pursuing STEM.



Did you know that many kids in the U.S. start out loving science, technology, engineering, and math (STEM), but that interest often fades as they get older? Researchers have looked into why this happens, and here's what they found:

- In elementary school (grades K–5), girls often do just as well—or even better—than boys in STEM. But after 5th grade, that changes.
- Special STEM classrooms help all students stay excited about these subjects, but that support often drops off in middle school.
- Some schools have more STEM resources than others—like good equipment and well-trained teachers—which can make a big difference.
- The biggest drop in interest happens in grades 6–8, especially for girls.
- Why do so many kids lose interest? It's often because of things like peer pressure, not seeing enough STEM role models, or not knowing adults who work in STEM careers.
- Kids who have parents or relatives working in STEM are more likely to stay interested because they have support and encouragement at home.

That's why our organization focuses on students in the early part of the STEM journey. By sparking curiosity and showing how exciting STEM can be, we hope to keep students inspired and ready to learn more as they grow!

## Resources

STEM-related information links:

### STEM Origins on Facebook

Join us on Facebook.

<https://www.facebook.com/profile.php?id=61572445529356>

### Invention Convention Worldwide

The Henry Ford Foundation's site for information about the global Invention Convention.

<https://inhub.thehenryford.org/icw/home>

### Bay District Schools

Official site for Bay County schools.

<https://bay.k12.fl.us>





---

## Origin Story: National Inventors Hall of Fame

With each issue of Origins, we bring you the origin story of real life inventors, men and women who have been inducted into the National Inventors Hall of Fame (NIHF). These are both famous and little known individuals who have made a significant contribution to the world with the realization of their ideas. Many thanks to the NIHF for sharing their content with us.

Have you ever wondered who thought up the idea of the crash test dummy? You know, that human-looking robot thing strapped into cars that are then propelled into concrete walls at high speed? Well, that was physicist, inventor, and engineer **Samuel W. Alderson**. Formally known as an ATD for anthropomorphic test device, the crash-test dummy has provided automotive engineers with valuable information, enabling them to design more effective safety features including seat belts and air bags. Such safety restraints are estimated to have saved over 300,000 lives since 1960. The dummy that is the current industry standard for frontal crash testing in the United States is a lineal descendant of one Alderson began manufacturing for the aerospace industry in the early 1950s.

In 1952, he started his own company, Alderson Research Laboratories (ARL), where he developed a dummy for use by the U.S. military to test parachutes and ejection seats and later for NASA to simulate the splash down of the Apollo nose cones. ARL also developed a dummy that was used to measure radiation levels in nuclear tests.



Born in Cleveland, Ohio and raised in California, Alderson graduated from high school at the age of 15 and attended several colleges including Reed College, the California Institute of Technology, and the University of California, Berkeley.

Samuel Alderson  
U.S. Patent No. 3,010,223  
National Inventors Hall of Fame induction: 2013  
Born Oct. 21, 1914 - Died Feb. 11, 2005

Attribution: <https://www.invent.org/inductees>

## Scientists in Japan Freeze Light

For the first time ever, scientists in Japan have found a way to trap light — and hold it still — for over an hour! Usually, light moves super fast, but using a special crystal made with super-cold atoms, researchers were able to stop light in its tracks.

This special material works like a "light memory stick." It can store light and the information it carries, then release it later without losing anything.

Why is this cool? It could help build ultra-fast, super-safe internet and even quantum computers — the computers of the future!

Freezing light might sound like science fiction, but it's real. And it could change the way we communicate across the world — and even space!

Attribution: [EU Corner](#)



---

# Volunteer Profile: Pamela McCarthy, Vice Board Chair

Ms. **Pamela McCarthy** has 32 years of experience as a Nurse Anesthetist (CRNA). She obtained her undergraduate degree in Nursing at the University of Michigan. She began her career caring for critically ill newborns at University of Michigan Medical Center in the neonatal intensive care unit, then transitioned to the NICU at Boston Children's Hospital.

After completing her Masters in Nurse Anesthesia at the Univ. of New England, Pam worked at the University of Massachusetts Medical Center, a Tertiary Care and Level I trauma center. She spent the past 28 years at Boston Medical Center South in Brockton, MA, a community hospital that provides care for an at-risk urban population. Here, she served as a staff CRNA, Chief CRNA and

clinical coordinator for students from Northeastern University/Boston and University of New England. Since relocating to Panama City Beach, Pam has joined the anesthesia department at the recently opened Coastal Tides Surgery Center, located at the new TMH medical office building, and enjoys providing anesthesia care to the local community.

Pam was drawn to a career in healthcare because it allows one to integrate multiple disciplines, including biology, chemistry, math, physics and technology, into an understanding of human physiology. The dynamic environment and culture of continued learning allows one to provide collaborative and compassionate care to patients over the lifespan. Pam resides in Panama City Beach with her husband, Colin.

## Upcoming Events

Some of our exciting events and activities coming in June and beyond:

- **19 July:** Annual Grandparents Day at Latitude Margaritaville Water Sound (LMWS), Oasis Room. This is another opportunity for us to increase STEM Origins visibility. We anticipate having giveaways, raffles, and other fun activities.
- **July:** We are in the process of selecting our Rising Star Scholarships for this year and expect to hold the Awards Ceremony at Gulf Coast State College in July.

## Fun(d) Raising News

Update on our latest events and funding for STEM Origins. Over the past month:

- **Capital City Bank** donated \$2,000 dedicated to Rising Star Scholarships at the following Bay County elementary schools: West Bay, Deane Bozeman, Parker, and Lucille Moore.
- **Mr. and Mrs. Eric Cremers** donated \$1,000
- **LMWS Farmers Market** booth generated interest from several potential mentors and raised nominal cash donations.

## About Us

Our mission is to support local education in science, technology, engineering, and mathematics (STEM) with projects that inspire students and teachers at every level of the academic ladder from kindergarten through college.

We seek to increase the quantity, quality, and diversity of high school and college STEM graduates. Our approach involves engaging students early (K-5) to foster interest in STEM subjects and maintaining engagement throughout middle school, high school, and college with progressively advanced activities.

Programs include providing hands-on experiences, classroom equipment, and access

to STEM professionals through visits, virtual presentations, and coaching on innovation and long-term goals. We plan to offer scholarships for college STEM fields and STEM camps for all grade levels overtime. Additionally, we support STEM teachers through grants for career development, professional growth, and innovative classroom experiments to enhance student learning experiences.

The STEM Origins Foundation is a 501(c)(3) nonprofit organization in Bay County, Florida. IRS Certification, Articles of Incorporation, and By-Laws are available on our website (see below).

Copyright ©2025 STEM Origins Foundation unless attributed otherwise.