

NASA Aeronautics

September 2024 No. 40

Monthly STEM Newsletter

INSIDE

Celebrate Hispanic Heritage Month

NASA MITTIC & Space2Pitch Competition

TEAMS II Grant, NASA Internships, & more!



Hispanic Employee Resource Group at NASA Johnson Space Center celebrating
Hispanic Heritage Month. Check out their podcast episode below.

Credit: NASA Johnson Space Center

September 2024

As you all know, the new school year is in full swing, Aeronauts! Hopefully you were able to take a break on Labor Day. In this edition we will help you celebrate Hispanic Heritage Month by sharing some of our Spanish-translated materials and our Aeronáutica en Espanol site. NASA student challenges have deadlines this month so don't miss the chance to encourage your students to apply! Spring Internship applications are closed but get students ready for Summer 2025 with NEW projects to apply for. Educators, don't miss your chance to have a NASA artifact or a NASA expert in your classroom--read on to learn more! Our Aero Crew Highlight, Holly Gutierrez shares the winding journey that brought her to NASA. Join Flight Log today to ensure you stay up to date with all things NASA Aeronautics, including our next steps towards the X-59's first flight.

Do you need to see more of something or have a new idea for upcoming newsletters? Let us know! Do you know someone else who needs this monthly update? Share the good news and <u>sign up for our monthly STEM newsletter</u>. Have questions or want to be removed from the list? Send an email to <u>april.a.lanotte@nasa.gov</u> or <u>holly.o.gutierrez@nasa.gov</u>.

www.nasa.gov

Hispanic Heritage Month

September 15 - October 15

In 1968, President Lyndon B. Johnson signed a proclamation designating a week to celebrate Hispanic Heritage. In 1988, President Ronald Reagan extended that week to September 15 - October 15 for Hispanic Heritage Month. During this time, we celebrate the cultures, histories, and contributions of Americans from Latin countries such as Mexico, Spain, South America, and the Caribbean.

NASA honors its diverse workforce every day. Head over to <u>Houston We Have a Podcast</u> to hear some of our stories and learn how each has achieved their goals. Celebrate with us this month and every day to honor our Hispanic Heritage family.

Inspire your students and visit NASA's page dedicated to our <u>Hispanic American family</u> and the contributions they give to their missions.

Aeronáutica en Español y más!

Did you know that NASA Aeronautics hosts the Aeronautica en Espanol web page which features all things aeronautics translated into Spanish? Check it out HERE!

¡Recursos geniales! (Cool Resources!)

Not only does NASA Aeronautics host a site dedicated to Spanish-translated content, there are also several STEM activities that have been translated to Spanish. <u>HERE</u> you can browse some of the collection.

¡Más NASA en Español! (More NASA in Spanish!)

NASA has content translated to Spanish for many of

its content areas. Check out more NASA in Spanish HERE. Want even more? The First Woman comic book is written in both English and Spanish! Head to the interactive First Woman website to enjoy the Spanishtranslated version: La Primera Mujer.



Aeronautics Crew Highlight

Holly Gutierrez, NASA Aeronautics STEM Support Specialist





Holly Gutierrez is the STEM Support Specialist for the NASA Aeronautics Research Mission Directorate. She first came to NASA as an intern and is celebrating her 1st year as a contractor this month. Read on to hear about Holly's journey to NASA!

Mission Directorate (ARMD) as the STEM Support Specialist. I am responsible for helping to put out this newsletter, so I hope you enjoy our content, and we welcome suggestions. I also help create content suitable for a variety of learning environments, conduct demonstrations at conferences and events, participate in discussion panels, and engage with the public all across the country and beyond (thanks to technology).

My path to NASA was not planned, and I never thought this would be a place for me. Not knowing what I wanted to do with the rest of my life, I started at Austin Community College to work on my core classes. I figured they would be accepted at most universities if I decided to continue school. I took a history of radio class because it sounded interesting and loved it. I completed my courses for the radio, tv, and film (RTF) degree and got an internship for a radio station. My favorite assignment was when I got to talk about Harry Potter for one of our on-air segments. Yes, I am a Harry Potter fan! I completed my RTF degree, but I wasn't off to work in radio just yet. I applied for the Disney College Program and was accepted!

Disney World! Another place I never thought I would find myself working. Before the college program, I had never been to Disney World, actually I hadn't really left Texas until leaving for Florida to work at Disney World. I worked at Epcot in the costuming department backstage. I did Mickey's dirty laundry plus a lot of his other friends'

Classroom Opportunities

Apply Now! NASA Artifacts screening

Now that school is underway, do you know what would be cool to have in your classroom? A genuine authentic NASA artifact. The NASA Artifacts office gives educators an opportunity to have real items from NASA missions in their classrooms, schools, or qualified organization locations. Apply for astronaut training clothing or hardware, a real space shuttle tile, and more. The screening period for applications will be open from *August 26 to October 7, 2024*. Get your application in now to inspire students with an artifact. Check out the NASA Artifacts webpage to learn more.

Student Opportunities

Apply Now! MITTIC

University student teams get the chance to share their entrepreneurial skills with NASA through MITTIC, the NASA MUREP Innovation and Tech Transfer Idea



Competition. Students create a proposal for new and innovative solutions that will benefit your community and the world! Submission proposals are due by **October 16, 2024** to get the chance to compete in the Space2Pitch Competition and earn cash prizes Learn more about MITTIC and how to submit your proposal <u>HERE</u>.

Gateways to BlueSkies



The 2025 Gateways to BlueSkies competition theme is: AgAir - Aviation Solutions for Agriculture. Collegiate student teams are tasked to create aviation-related systems that can be applied to the

agriculture industry by 2035 or sooner with the goal of improving production, efficiency, environmental impact, and extreme weather/climate resilience. Get your team together and submit your Notice of Intent by **October 22**, **2024**! Find more information HERE.

laundry too (HAHA). I was entrusted to deliver costumes to performers throughout the Disney World parks and set up for special events including packaging and sending costumes for events happening abroad. Although I loved working for Disney World, I really wanted to put my hard-earned RTF degree to use.

I returned to Texas and began working in promotions and marketing for a radio broadcasting company. My team and I supported three radio stations, two music focused and the other a sports and public broadcasting station. I was fortunate enough to meet some very cool artists and performers while working in radio, but my work hours were all over the place and not good for having a baby. OH MY!

I became pregnant with my first child and decided to leave the radio business. I was so nervous to one, be a mom, and two, leave my job to be a stayathome mom. Another job I never thought I would have. I honestly didn't think much about having kids until now, much less be a full-time mom. WOW did this job take me by surprise. I LOVED being a stay-at-home mom. I got to see all my kids' firsts and watched them grow into little people and learn new things. The world was so new to them, so everything was amazing. I loved that learning, so I decided to take me and my kid to preschool.

I continued school at Huston-Tillotson University to complete my bachelor's in education. As a teacher, I followed my kids through preschool until my youngest reached kindergarten, then I followed them to elementary school. Preschool was my favorite because the little littles were so eager to learn, explore, and I loved all the hugs! It is hard when they're just learning their motor skills and pooping in a toilet, but I loved being there when they achieved those skills that we take for granted, like holding a spoon. We would get excited like they just won a World Cup, and then they would get excited. It was infectious, in the best possible way. Then, the pandemic happened.

The pandemic turned everything upside down. I made the very difficult decision to leave the classroom and start homeschool. Yet again, I find myself in another job I never thought I would have—Homeschool Teacher. I loved this too! I got to see my kids learning milestones firsthand and

Get Ready for Summer 2025! NASA Internships

Spring 2025 is all booked up and it's time for students to get their applications in early for Summer 2025 internship opportunities. The deadline for early decision is **October 25.**



October 25, 2024. Students 16 years and

older are eligible to apply. Encourage your students not to wait! Learn more <u>HERE</u> about available STEM and non-STEM projects at NASA centers throughout the country that offer in-person, virtual, and hybrid internship opportunities.

In celebration of Hispanic Heritage Month, join current and former NASA interns for an exclusive virtual event showcasing a vibrant and diverse next generation STEM workforce. Join the virtual event: *Celebrating Hispanic Heritage Month with NASA Internships* on Thursday, September 19, 2024, at 4:00 pm EST. Register HERE on STEM Gateway.

NASA TechRise Student Challenge



The NASA TechRise Student Challenge is for students in grades 6-12. Student teams are challenged with submitting their ideas for high altitude experiments with exposure to Earth's atmosphere and views of our planet. Entries are due by **November 1**st, **2024**, and selected teams will start building their projects in January 2025. Head to the <u>TechRise webpage</u> to learn more about this student challenge.

help them improve their skills with one-on-one instruction. I knew I wanted to go back to the classroom someday so, I decided to enroll at Southeastern Oklahoma State University for a graduate degree in curriculum & instruction in science. Here, I heard about a NASA internship webinar and wanted to know more.

I was fortunate enough to be chosen to intern with NASA Aeronautics and after my third session, I applied to be a contractor to stay with my ARMD family. This month I celebrate my one-year anniversary. My journey was not easy, and it was not a straight line to NASA. I have had many jobs where I was in a place that I never thought I would be. I always had the mindset of "why not". Why not try that class, why not apply for this internship or that job, why not stay at home with my kids, why not. I figured the worst that could happen is I'm right back where I am now, so why not try something different. ""

Holly Gutierrez, you have had a long and winding journey to NASA. Thank you for showing us your perseverance and continued support to the NASA mission. Congratulations on your one-year anniversary! Happy Flying!

Professional Development

and Shannon Eichorn.

Sept. 27-Oct. 1, 2024: Association of Science and Technology Centers (ASTC) National

Conference "Diversity and Inclusion in STEM
Through Stories, Music, and Art." Sat. Sept. 28th 45pm CT. NASA ARMD Presenters April Lanotte

NASA CONNECTS: Are you interested in other professional development opportunities? Create a new account or log into NASA's STEM Gateway to find a session that interests you.

NASA SPARX: NASA is now accepting submissions via the online interest form within NASA CONNECTS for those interested in bringing SPARX to their classroom during the 2024-2025 school year.

We are interested in receiving responses from K-12 STEM Coordinators/Leads who have identified a cohort of at least 3 educators to engage students

Educator Opportunities & NASA in Your Classroom

Due This Month! New TEAM II Grant Proposals

Proposals for the "TEAM II Community Anchor" closed on August 27th, but there's still time to apply for the STEM Innovator grant.

Only offered on alternating years, the STEM Innovator proposals must be submitted by **September 26, 2024**. The new STEM Innovator funding tier will fund awards of approximately \$250,000 each. In addition, the highest tier award will be designated the "National Connector" award and fund initiatives up to \$900,000.

This is an extension of the program from a two-tier to a three-tier system by adding a mid-level funding tier to Next Gen STEM's Teams Engaging Affiliated Museums and Informal Institutions (<u>TEAM II</u>) program. Learn more about the TEAM II grant funding opportunity and how to apply at <u>go.nasa.gov/team-ii</u>

Invite NASA! NASA Engages

Bring a subject matter expert, science fair judge, speaker, or other NASA professional to your school or organization in person or virtually. NASA engages is a new program for NASA to share their missions and content at educational, professional, civic, and other public venues. K-12 to post-secondary entities, libraries, museums, professional and technical organizations, community groups and others can submit a request for a NASA Expert to attend their event. Learn about submitting a request HERE.

Virtual Opportunities

Sign-up Your Classroom Today! Flight Log

School is in session and teachers we have something for you. Flight Log is an interactive program to sign your name to fly virtually with our NASA pilots on NASA



in hands-on STEM learning designed to expose students to NASA's projects and career opportunities.

Next Gen STEM SPARX (Sparking Participation and Real-world experiences in STEM emphasizes engineering to connect students to STEM in a way only NASA can! The Engineering Design Process is an iterative process involving a series of steps that engineers use to guide them as they solve problems, and is crucial to mission success at NASA.

SPARX provides educators with hands-on, national standards-aligned activities, related training resources, connections to professional learning communities, and virtual connection with NASA experts to bring STEM to their students.

Did you know?

September 2nd is Labor Day. Celebrated the first Monday in September, Labor Day recognizes the contributions of all workers to America's strength, prosperity, and well-being. Take this day to celebrate all the hard-work it takes to do the job you do to keep our country moving forward. Relax, and have some fun today making paper airplanes.

September 9th is International Sudoku Day. In 2013 the World Puzzle Federation dedicated this day to the popular numbers game. Sudoku is played on a 9x9 grid with 3x3 sub-grids. The goal is to fill each sub-grid with numbers 1-9 without repeating numbers in any row or column. Try our X-plane Sudoku and see if you can solve this aviation-themed version.

September 14th is National Coloring Day, and Aeronautics has some great <u>aviation-themed</u> <u>coloring pages</u> to celebrate the day. Coloring is a simple activity that promotes brain function, meditation, not to mention strengthening those fine motor skills. Grab your aviation coloring pages and relax with some sweet colors.

research planes. Enjoy videos about the pilots and crew, STEM activities for all ages, and collect endorsement stamps when you attend NASA events either virtual or inperson. Sign up with Flight Log today! Add your email to our contact list to stay up to date on upcoming flights and other opportunities. By the time you know it, we'll be flying on the X-59!

Links to our Aeronautics STEM Resources:

<u>Aeronautics Research Resources</u>: (all ages) This link takes you to a wide variety of educator resources, Aeronautics@Home, ebooks, National Academies Reports, webinars, lithographs and mini posters, the NASA Aeronautics Research Institute, and more.

<u>Aeronautics@Home</u>: (K-12) This web page contains aeronautics-based activities, videos, games, and more that can be completed at home, in the classroom, or in any number of settings. Topic areas include: "Build It!" "Explore It!" "Watch It!" "Solve It!" and "Aero Educator Resources". Coming soon: "Read It!" and "Do It!"

<u>Aeronautics Innovations Challenges</u>: Keeping up with our many design challenges and opportunities for both post-secondary and K-12 can be tough. In response, we created a "one-stop shop" to pull them all together in one location.

<u>Flight Log Experience:</u> (K-12, post-secondary, general public) Sign up to send your name with NASA Aeronautics on X-planes, UAS flights, and more as you build your virtual NASA flight log. Earn virtual endorsement stamps and mission patches and access aeronautics STEM activities and resources. Educators can sign up their entire class.

<u>NASA Express Sign-Up</u>: (K-12, post-secondary) Have you signed up for NASA's NASA EXPRESS weekly newsletter? This newsletter contains the latest information for educators (K-12 and post-secondary) about new resources, design challenges, internships, and workshops. It is THE go-to for the latest STEM news.

<u>Aeronaut-X</u>: (K-12) Our Next Gen STEM: Aeronaut-X team provides new and exciting STEM activities that focus on cutting-edge aeronautics education and the future of flight.

Museum and Informal Education Alliance: (Informal Educators and Museums) Not in a classroom? Looking for informal education materials? Join NASA's Museum and Informal Education Alliance, where you have access to NASA resources—including aeronautics—for your program, organization, museum, science center, or library. Find out about events happening near you and in the virtual world, and let the MIE Alliance help you build your programs! Access to guest speakers, the latest announcements about grant programs, and an active community network allow you to connect with other like-minded people in a supportive, engaging, and aerospace-focused neighborhood.

<u>NASA Aeronautics for Educators Facebook Page</u>: (K-12, post-secondary) Join our NASA Aeronautics for Educators Facebook page, where the latest aeronautics updates, professional development opportunities, lessons and ideas are freely shared.

<u>NASA Connects:</u> (K-12, post-secondary) NASA Connects is a network of educators who come together to collaborate, share NASA resources, and create personal collections of materials that can then be shared with others. Members can join groups tailored to their specific interests.

National Aeronautics and Space Administration

Headquarters 300 E. Street, SW Washington, DC 20546