# STEPPING BEYOND BOUNDARIES

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A single step, more than 50 years ago, captivated a world hungry to achieve the impossible. Today, that spirit still lingers within so many brilliant young minds ... our next generation of space leaders, entrepreneurs, and explorers. Infused with passion and drive, they're ready to tackle new boundaries. They dream of exploring deeper into space than we ever imagined. But, preparing them for this challenge doesn't happen overnight. It takes time, and they need our help.

## Enter the Aldrin Family Foundation.

We strive to ignite a love for science, technology, engineering, arts, and mathematics (STEAM) in the hearts and minds of learners as young as five to undergraduate and graduate students and on to working professionals. As a 501(c)(3) nonprofit, we create space-based educational tools, curriculum, scholarships, and programs that drive curiosity and engagement in this dynamic new era of space exploration.

## The Foundation's Workforce Pipeline



### K-12

Space comes alive for children through <u>ShareSpace Education</u>, our K-12 division. Our one-of-a-kind educational tools, the <u>Giant Mars</u> & <u>Moon Map</u><sup>m</sup> packages, spark creativity in students while teaching STEAM concepts. Children become excited about learning and gain exposure to the amazing opportunities that lie within space exploration.

## **Undergraduate – Graduate Education**

We engage university-level students in accredited, interdisciplinary, undergraduate and graduate programs, with particular emphasis on space studies.

## **Working Professionals**

At the <u>Aldrin Space Institute</u>, we provide working professionals the opportunity to participate in workshops, perform technical analyses, and publish research that advances space exploration and gets us one step closer to landing humans on Mars.



The Aldrin Family Foundation was the vision of Apollo 11 Lunar Module Pilot and second man to walk on the Moon, Edwin "Buzz" Aldrin, Jr., who created the organization in 1995. He repurposed it into an educational foundation in 2013, with special emphasis on targeting underserved populations. His vision continues today.

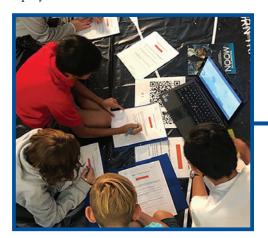


# Impactful Footprints

Thanks to our donors and partners, we've provided more than \$5 million to deliver modern educational programs spanning kindergarten through working professional levels.



Through integrated partnerships with school districts around the world, along with our grant program, we have distributed <u>Giant Mars & Moon Map</u><sup>max</sup> packages to 500+ schools in 47 U.S. states and 11 countries. The packages have energized more than 250,000 students to explore STEAM concepts using the wonderment of space exploration. With 90% of these schools located in underserved populations, we strive to provide every child the opportunity to be successful through equity in education.

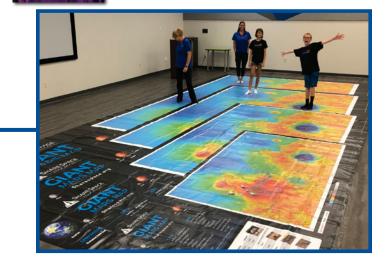


Created the Aldrin Space Learning (ASL) Hub concept and have established several of them at universities across the U.S. and the United Kingdom. Each ASL Hub serves as a regional center where educators who use our maps gather to share best practices and collaborate on lesson plans. Educators may also take advantage of university support for professional mentoring and curriculum development to enhance their skillsets.



"I want to learn about space because I want to be the first person on Mars." Ariana, 8

### Click to view video





To celebrate Teacher Appreciation Week in May 2020, we worked with **NASA's Office of STEM Engagement** to produce a one-hour show, "The First Residents of the Moon & Mars are Today's Students." The virtual chat featured three accomplished female astronauts from diverse backgrounds, all with deep roots in education. The conversation honed in on the importance of active learning to inspire the Artemis Generation. The show was distributed widely through NASA and Aldrin Family Foundation channels, as well as South by Southwest Education (SXSW.edu) thanks to our partner, Public Consulting Group.

## Click to view event replay



Launched and currently operate the Department of Defense <u>STARBASE Academy</u> at the 45th Space Wing, Patrick Air Force Base along Florida's Space Coast. Targeted primarily to at-risk fifth graders in Florida, this national program motivates students to explore STEM through active learning. The high-tech, hands-on academy integrates *Giant Mars & Moon Map<sup>TM</sup>* packages, inquiry-based curriculum, and realworld STEM applications.



Created and launched the International Space University's <u>Center for Space Entrepreneurship</u>, the only fully accredited, graduate-level certificate program of its kind in the United States. Graduate students in this esteemed program receive rigorous training in the fields of space finance, policy, management, technology, and entrepreneurship. Participants gain valuable, real-world insight that sparks economic innovation in the fast-emerging commercial space industry.



Endowed \$110,000 of earned revenue to the <u>Astronaut Scholarship Foundation</u> to establish an annual \$10,000 financial award to an undergraduate student who is excelling toward a STEM degree, while complementing their studies with additional focus in creative arts, business, and/or law.



Since its formation in 2015, the <u>Aldrin Space</u> <u>Institute</u> at Florida Tech has advanced space exploration and development toward the goal of establishing and sustaining a permanent human presence on Mars. As a result, we have:

- Received more than \$750,000 in research funds to support human exploration of the Moon and Mars, as well as commercial space enterprise
- Contracted with Springer Publishing to produce the "Lunar Habitat Reference Manual," a 1,000-page guide featuring chapters from 50 leading academic industry and government experts



## **Our Quest to Step Beyond**

Join us in our quest to step beyond boundaries and continue to make pivotal progress in building an inspired, passionate, and talented STEAM workforce for the future. Our goal is to raise \$10 million over the next five years.

With your generous support, we can make enormous advancements in our three priority areas. Look what we can achieve together ...

Click here to make a donation today

# **Funding Priorities**

## K-12/ShareSpace Education Programs Goal: \$6 million

#### (60% of our campaign)

- Deliver Giant Mars & Moon Map<sup>™</sup> packages to hundreds of additional schools, reaching nearly half a million more students in primarily underserved communities
- Fund 10-15 additional Aldrin Space Learning Hubs at universities to support map communities in other geographic regions throughout the U.S. and abroad
- Continually create new online, standards-based content for broad distribution and use in formal and informal educational settings

# University Programs Goal: \$2.5 million

#### (25% of our campaign)

• Expand our number of university partners and collaborate with their leading researchers to create stateof-the-art K-12 curriculum and content beyond our *Giant Mars* & Moon Map<sup>™</sup> packages (i.e., virtual reality programs, unique online content, etc.)

Increase the number of scholarships to attend the Center for Space Entrepreneurship program

## Working Professional Programs

# Goal: \$1.5 million

#### (15% of our campaign)

- Support cutting-edge research on exploration of the universe and commercial space development
- Expand opportunities to mentor start-up companies emerging from the Center for Space Entrepreneurship

#### Testimonials

#### **ShareSpace Education**

"When they are on the map (Giant Moon Map<sup>™</sup>), I can see my kids finding ways to be engaged in science, reading and math that will accelerate their learning."

Dr. Jesus Jara Superintendent, Clark County School District Las Vegas, NV

"Often times, in many subjects, that hands-on application, realworld relevancy is missing, and in talking with teachers, that was one of the aspects of this project that they were really, really excited about."

> Dr. Andrew G. Houlihan Superintendent, Union County Public Schools Monroe, NC

"The Aldrin Family Foundation has created an authentic tool where students are engaged and doing things for themselves. The maps improve students' confidence in the ability to solve real-world problems, while increasing students' appreciation for collaborative learning."

> Beth Leavitt 2020 AIAA Teacher Spotlight Awardee, 2017 National Space Educator of the Year Greenville, SC

#### **Center for Space Entrepreneurship**

"The Center for Space Entrepreneurship was a significantly valuable resource that has since enabled me to think, speak and examine both my new job and the space industry with more depth."

> Kryn Ambs Class of 2019 Payload Operations & Safety Engineer Made In Space, Inc.

"I particularly enjoyed the policy and global programs segments, which allowed me to contextualize the environments in which space companies operate and the decisions they make on a dayto-day basis."

> Alex Coultrup Class of 2019 Matthew Isakowitz Fellow at XPRIZE

#### **Aldrin Space Institute**

"The Aldrin Space Institute not only financially supported my academics throughout my Ph.D., but also allowed me to get hands-on experience in the spaceflight industry. It exposed me to front-of-the-line research in areas such as human Mars sustainability and built my networking capabilities through several workshops and conferences in the United States and abroad."

> Shawn Shirshekar Doctoral Candidate, Graduate Research Assistant and Project Coordinator Aldrin Space Institute at Florida Tech

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