

#### 2 U.S. SPACE & ROCKET CENTER 2016

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On the cover.

The U.S. Space & Rocket Center's newest exhibit, "ISS: Science on Orbit."



Space Camp Alumna Dr. Kate Rubins aboard the International Space Station.



# Inspiration: Station

NASA is taking its crucial first steps toward the Journey to Mars, and the Rocket Center is proudly showcasing the work of Marshall Space Flight Center. We are giving visitors and trainees an insider's look at the science – and the people – that make it all happen.

We are training them now for the upcoming space missions, too. Space Camp has shifted from the Space Shuttle to the missions of our future – manned Mars exploration on Orion and SLS, and commercial manned missions to the International Space Station and beyond. Science on Orbit, our NASA-funded exhibition of the payloads and systems of the International Space Station, lets them walk through space station modules, providing an authentic, contemporary view of NASA's work "Off the Earth for the Earth." As they depart Science on Orbit, visitors see our Space Camp trainees performing EVA activities on the most dramatic stage.

2015 also marks the year the Rocket Center began an ISS payload, Sally Ride EarthKAM @Space Camp. This NASA-funded Earth observation experiment gives students around the globe the chance to select and capture their own images of the Earth using equipment aboard the station. Sally Ride EarthKAM @ Space Camp expands our educational reach in unprecedented ways, and provides a global audience for our programs and mission.



Space Camp Academy students set up a communications array during their Mars mission.

Financially, the Rocket Center continues to operate on our own earned income, while investing in improvements to the guest experience and facilities necessary to continue the positive trends in both museum and education program attendance. This financial stability and fiscal prudence enable each and every gift and donation to have the maximum impact on the Rocket Center's mission and future.

The Rocket Center is poised to grow in this period of resurgent international interest in space science and human exploration. The contents of this report are just a fraction of the life-changing experiences that occur every day at the U.S. Space & Rocket Center and Space Camp. Whether you are a lifelong member, or you find yourself from time to time in the Rocket City, I hope that you join us on our mission to explore and inspire.

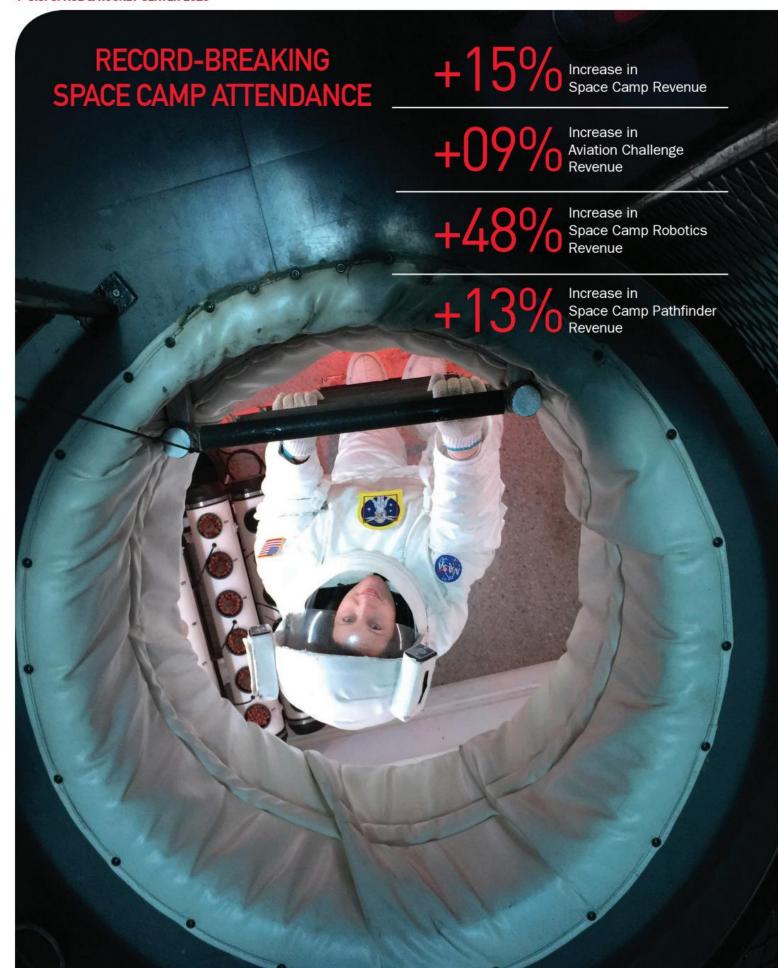
Warmest regards,

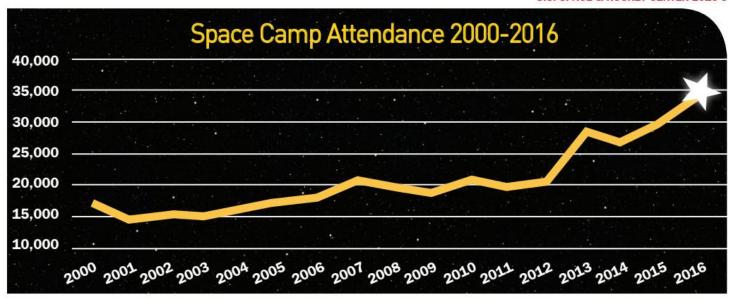
Dr. Deborah E. Barnhart

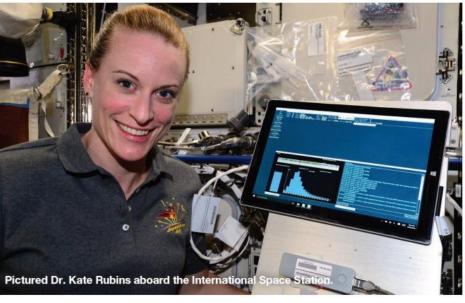
Chief Executive Officer and Executive Director











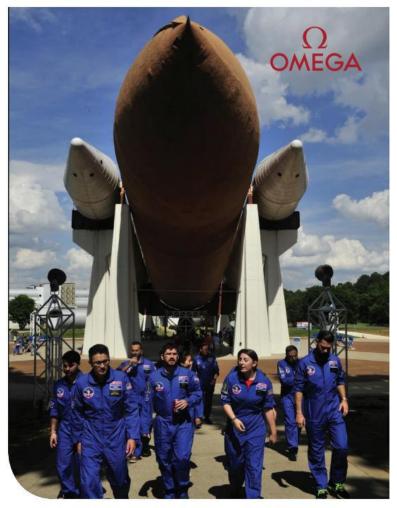
# Kate In Space

Dr. Kate Rubins, a 1995 Space Camp graduate, became the third Space Camp alumna in space when she lifted off aboard a Russian Soyuez spacecraft July 6, 2016. During her 115 days in space, Kate, a microbiologist, became the first person to sequence DNA in space.



# Space Camp® Highlights







SCIVIS had a record-breaking year of 211 students from 8 countries and 25 states.

3,610 27



2,068

**29**Years

# **Custom Programs**

Each year Space Camp welcomes students to programs for both the blind and visually impaired and those with hearing impariment. For SCIVIS, Space Camps for Visually Impaired Students, a team of volunteers equips Space Camp and Aviation Challenge activities with Braille, large-print type and magnification to allow students have a complete experience.

Sign language interpreters help students at Space Camp for the Deaf and Hard of Hearing through their activities, and special guests from NASA and local universities show them careers they can pursue.

## **Custom Camps**

U.S Space works with corporations and groups interested in leadership training and team building programs each year. 2016 was a busy year as many groups took place in Space Camp and Aviation Challenge activities.

#### 2016 Custom Camps

Christy Garvin
Team Phoenix
UAB
Alabama A&M ROTC
AEXA
Defense Acquisition University
Honda
Hexcel
Redstone Federal
Steelcase
UAH OLLI

Emerson Network Power NASA OLIA Omega

Omega Google Fiber Fleet Feet
Leadership Huntsville
State Farm
Airmed
Jemison High
UAH OLLI
HealthSouth
Boeing
Health South
PPG
MOWW
Green Power
U.S. Army 117ARW
Strong Bonds Unit

**JROTC** 



## Educators at Space Camp

#### STEMcon

In 2016, 93 teachers attended Space Academy for Educators on scholarships funded through a NASA grant. These STEMcon educators were from the Marshall Space Flight Center service area that includes Alabama, Arkansas, Iowa, Missouri and Tennessee.

#### Alabama Teachers

For the second year, Alabama educators took part in an immersive program to prepare the state's next generation workforce for STEM careers. Ninety-two teachers registered for this program, which is made possible through funds from the Alabama Legislature.

#### International Space Camp

Teachers of the Year from 46 states and American Samoa along with 15 countries attended this year's International Space Camp. The Council of Chief State School Officers coordinates bringing the educators to the National Teacher of the Year Program each year.

#### Northrop Grumman

Since 2006 Northrop Grumman has sponsored a program that brings teachers and students to Space Camp. In 2016 80 students attended Space Academy and 48 teachers went to Space Academy for Educators.



## Honeywell

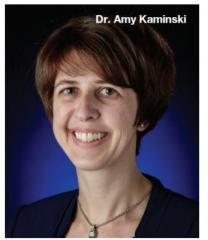
Honeywell Hometown Solutions sponsors two important programs annually: Honeywell Educators @ Space Academy and Honeywell Leadership Challenge Academy. In 2016 200 teachers from 25 countries and 36 U.S. states and territories attended HESA and 320 students from 36 countries and 30 U.S. states and territories attended HLCA.

More than 4,000 students and educators from 55 countries and 52 U.S. states and territories have attended these scholarship programs.













# Alumni Hall of Fame

For the ninth year the U.S. Space & Rocket Center recognized outstanding alumni and Space Camp supporters with induction to the Space Camp Hall of Fame. The 2016 honorees were: Jason Hopkins, former NASA Fellow and aerospace engineer at Masten Space Systems; Dr. Amy Kaminski, senior policy advisor to NASA's chief scientist; George Whitesides, CEO of Virgin Galactic and the Spaceship Company; and the cast and crew of the movie "Space Camp."



## T-Minus Beer

For 2016 Space Camp SummerFest, the U.S. Space & Rocket Center partnered with Yellowhammer Brewing, to create a Tang-inspired Tangerine Kolsch. The beer proved to be so popular that Yellowhammer is going to produce it year round, with a portion of the proceeds going to the Space Camp General Scholarship Fund.







# Rocket Center Highlights

#### Museum Operations Overview

120% Ticket Per Capita

121% Memberships

13% Merchandise



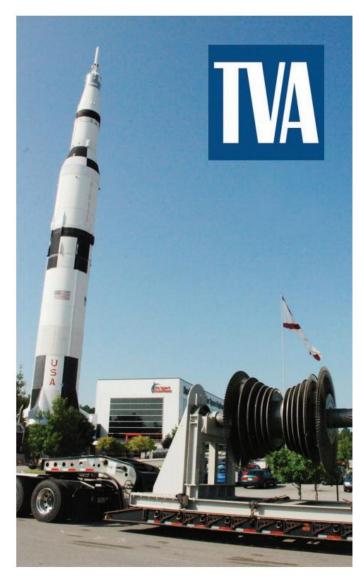
## Tourist Attraction +657.500 Guests

Alabama Tourism Department named the U.S. Space & Rocket Center the state's most visited again.



The U.S. Space & Rocket Center is now an Official Visitor Information Center for the Tennessee Valley Authority, energizing a bright future for the Rocket Center's energy exhibition plans. With the signing of an official Memorandum of Agreement in January 2016, the official partnership kicked off with the presentation of \$50,000 from TVA toward the cornerstone of a new TVA exhibit, which will be anchored by a 75,000 ton rotor from one of TVA's coal-fired power plants.

This partnership spans several of the Rocket Center's education and infrastructure projects, everything from Robotics Camp to the new McDonald Creek Greenway has been implicated in possibilities for cooperation between the organizations. The U.S. Space & Rocket Center welcomes TVA employees and their families into the Rocket Center and Space Camp families.





### VIP Visitor list

- · Warren Lichtenstein, Chairman of the Board Aeroject
- · Jeff Thornburg Sr., Senior Director of Propulsion SpaceX
- · Dr. Dava Newman, Associate Administrator, NASA
- Astronaut Mike Massimino
- Dr. Mike McGinnis, Executive Director, Strategic Air & Space Museum
- · Poarch Creek Indian Tribe
- · Jay Williams, Assistant Secretary U.S. Dept. Commerce
- · China Space Foundation
- · Austrian Ministry of Defense
- Royal Thai Army
- · Jimmy Wales, Wikipedia founder
- · Astronaut Kjell Lindgren
- · Akio Toyoda & Nobuyori Kodaira, Executive VP, Toyota Hdq
- Office of Legislative Affairs (OLIA)
- · Threat Defense Agency
- · DAIKIN America
- · Colin Baker, the 6th Dr. Who
- · Corey Smith, country music singer
- Barry Goldwater Jr. & family
- · Dr. Margrit von Braun & Peter von Braun
- · Jim McMahon, Member of Parliament, United Kingdom
- Hollyanne Milley, wife of General Mark Milley, Chief of Staff of the U.S. Army
- · Billy Bob Thornton, actor
- · IndyCar drivers Alexander Rossi & Conor Daly





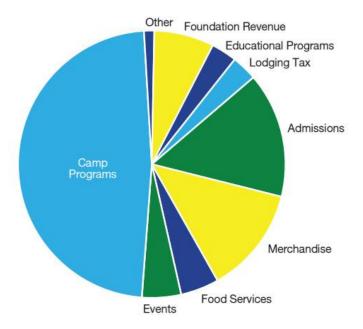
# Financials

#### Record Year

The USSRC continues to maintain operational equilibrium, enabling us to make critical upgrades to the facility and improve the guest experience with new exhibits and programming. The financial stability the Rocket Center has achieved positions us to keep growing along with the post-shuttle resurgence of NASA and the successes in commercial space flight.

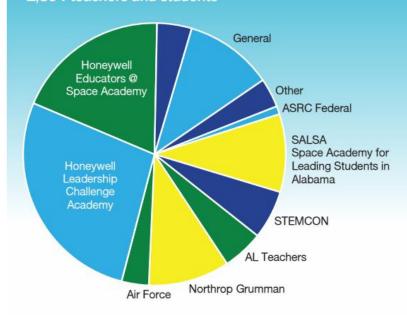
In addition to the strength in our core business, part of the Rocket Center's success comes from the performance of a diversified revenue stream that includes international traveling exhibits, Space Camp licensees, special events and catering, merchandise sales and custom camps.

#### Center Revenue: \$32.9 million

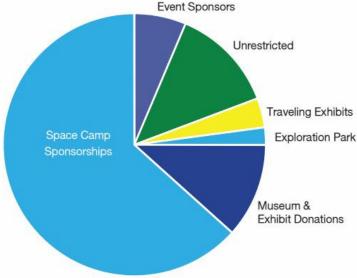




## More than \$1.48 million in scholarships awarded to 1.394 teachers and students



#### Foundation Revenue: \$2,332,979



Each year, the U.S. Space & Rocket Center Foundation receives proceeds from the revenue from the sale of "Save the Saturn V" specialty license plate tags. In 2016, the Center received \$126,053 from the sale of the tags.



These funds are committed to the following programs:

#### Alabama Teachers to Space Academy

Provides a scholarship for a teacher from every school district in Alabama to attend Space Academy for Educators.

#### Space Academy for Leading Students in Alabama

Provides a scholarship for a male and female student from every state legislative district in Alabama.

#### Space Camp for Alabama Classrooms

For groups of students 12 or more, Space Camp weeklong programs are half-price (\$499).



\$1,099,000 Lod Rec

Lodging Tax Receipts

The U.S. Space & Rocket Center receives funds from a 1% tax levied on lodging in Madison County.

More than 50% of the Center's estimated \$84M economic impact in the Huntsville area is generated from out-of-state visitors.

\$50,000

Madison County Legislative Delegation (TVA Exhibit)

\$75,000 City of Huntsville

\$7,500

City of Madison

# Your Support Matters

The U.S. Space & Rocket Education Foundation is a 501(c)(3) organization raising funds and awareness to support events, programs, facilities and overall growth of the U.S. Space & Rocket Center and Space Camp. Gifts to the foundation provide for new exhibits; capital improvements; artifact restoration; Space Camp, Aviation Challenge and Space Camp Robotics scholarships; field trips and educational events.





### Honeywell



















#### MEMORIAL AND HONOR GIFTS

A gift to the U.S. Space & Rocket Center Education Foundation is a thoughtful way to honor the memory of a loved one. A tribute gift is also a meaningful way to salute an individual or celebrate a special occasion. Tribute gifts may support a variety of programs at the Rocket Center such as artifact care and restoration, Space Camp scholarships, capital project funds are among options.

"When Josh was alive, he had really wanted to set up a similar scholarship program to send special needs kids to space camp. He had started the process but died before he was able to implement it, which is why we wanted to move forward with it in his memory," said Adam Small, whose family set up the Josh Small Space Camp Scholarship Fund.



Jan Smith Chair



Ben Chandler Vice Chair



Jeff Samz Secretary/Treasurer



Ed Buckbee



Dr. Waymon Burke



Tom Butler



Dr. Patti Dare



Dr. Dorothy Davidson



**Homer Hickam** 



**Dan Montgomery** 



Sen. Arthur Orr



Patrick Scheuermann



Sasha Sealy

#### PARTNERS IN OUR FUTURE - MARS FLYERS Honeywell Hometown Solutions \$823,046 Northrop Grumman Foundation \$286,970 Russell A. Lagasse Trust \$250,000

System Studies & Simulation, Inc. \$130,000 State of Alabama - Specialty Tag 126,053 Additional donor categories:

#### APOLLO \$50,000 to \$99,999

Jesse F. Bennett Charitable Foundation City of Huntsville Tennessee Valley Authority Madison County Legislative Delegation Madison County Commission GEMINI \$20,000 and >

Chambers Bottling Company LLC Aegis Technologies ASMDA

**Orbital ATK** 

Joyce Neighbors Boeing MERCURY \$5000 and >

Jacobs Engineering National Space Club

Toyota Motor Manufacturing AL

U. S. Department of State - Morocco and Algeria posts Barbara Small Jean Wessel Templeton PPG Industries Foundation

ASRC Federal Birmingham Airport Authority Teledyne Brown Engineering

INSPIRE Ben Chandler The Benevity Community

Delta Gamma Foundation Linda Smith Donna White

City of Madison Dept. of Public Instruction Limestone County Legislative Delegation

MATHCOUNTS Dorothy Davidson SAIC

GEOCENT LLC Sheila Lindley UAH Office of Alumni Relations Keith Massey Lockheed Martin

Target Corporation Corporate Office Properties LP REDSTONE \$2500 and > ΔΡΔΔ

Redstone Federal Credit Union Swatch Group AT&T Adalberto Carreon Jr. **Huntsville Utilities** Joel Marcus John Ramsey

#### FRIENDS OF THE CENTER

Int'l Star Trek Fan Association

Shelley McGuire Sanmina Andrew Silvestri Darrel Massey Jan Nell Bryant Baron Services Mechanisms Education Association

Dr. Deborah E. Barnhart Anderson Hotels

Rvan Brukardt

Strategic Defense Solutions Accurate Machine and Tool National Travel Service Cvient, Inc.

NASA/MSFC Retirees

Ellen Adler Demsky Honeywell International Charity Matching Angel & Cynthia Almodovar

Richard Green NDIA Tennessee Valley

Stephanie Kayden Don Thomas Sasha Sealy

Arcata Aerojet Rocketdyne Foundation Andrea Hanson

Premiere Dental Barrios Frank Caprio Deborah Anderson

Semper Fi Community Task Force GFWC du Midi Woman's Club

Genex Systems, Inc H. Doug Johnson Ann Close Cynthia Brown Catherine Donnelly Daniel Wilson Linda Olson

UAH Al Signal Research, Inc. William H. Stender Jr. Mary Ann Kaiser MartinFederal Consulting, LLC Bank of America Charitable Foundation

[\$1000 BREAK] Michelle Ham

Network for Good

Bill Carswell

State Teachers of the Year 2016 Virginia (Suzy) Young Brian Bellomy Mr. and Mrs. David Barnhart Floyd County Schools DonorsChoose Whitfield County Schools Air Force Association Meredith Motsinger Michelle Christensen

**KB** Fuschetto Museum Tour, Inc. Catherine Howard Lisa Cochran-Neilan Teddy Thomas Andrew Partynski Tony Tripeny Joy B. Lingle Energy Huntsville Goldner Construction Pamela Appleby Rotary Club of Dalton William Chandler Louis Ramirez Claire Nasuti Rebecca Sparks Stacy Shannon Elizabeth Driscoll Julie Wokaty-Kozma NASA Exchage Lara Warren The GE Foundation John Atkins Jane Mattoon **David Thomas** Capri Theatre Stemlock, Inc. MSB Analytics Inc. Rodd Perry Frederick Lanier Bryan McKay Tamara Jenkins **Eric Tilenius** Elena Syurina Woody Anderson Ford Brian Kirkland Amelie von Koczian Janet Green Rufus Edmisten Fred Benjamin Cynthia Morgan Sean Squire Julia Warren-Ulanch Connie Chaklos PayPal Giving Fund Hannah Ridge John Stewart Jeffrey Richardson Teresa Bullock Ann Brady William Skinner Randal Lycans Allen Evans Rob Troy

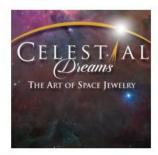
Mark Andrews

Robert Humphrey Stephanie Roach Robert Johnson Aerospace Testing Alliance Catherine Hepinstall James Cain Deborah Baugh Carl Schramm **Douglas Brandt** Joseph Acaba Margaret MacDonald CFC Research Corporation Patricia Small Kilpatrick Townsend & Stockton LLP Heather Nelson Joann Reeder Stephen Barnes Carol Vassey Steve Newton Steven Pearson Anne Bell Kristina Wang Sara Lane Ngan Nguyen Heather Stevenson Matthew Rasmussen Scott Young Laura Hole Jennifer Ebert James L. Moses Best Western Madison-Huntsville Hotel Laurie Parres Curtis DeJarnatte Erika Wagner Kelly Greenlee Van Eure Shirley Quayle Linda Walmsley Simone Benyacar Gertrude Revelle Betty Sue Hussey Hoyt Tessener Marva Babb



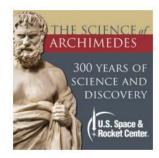
Kathryn Mullins

# Special Exhibits The Center enhances its permanent collection with exhibits that change during the year.



Celestial Dreams - The U.S. Space and Rocket Center's worked with Huntsville jewelry designer Kathy Chan to develop this exhibit of her space- and natureinspired jewelry. "Celestial Dreams, the Art of Space Jewelry" showcases Chan's genuine awe of the cosmos and the Earth through her use of precious gems, minerals and metals.





Archimedes - The Rocket Center was the location for the world premiere of "The Science of Archimedes." Created by the Artisans of Florence, the exhibit includes more than 140 items and dozens of models that illustrate the genius of the man considered to be the "Father of Modern Science."





SmartPlay - "Summer Smart Play" created a fun-filled space for all ages as the Rocket Center displayed recently acquired exhibits from Sci-Quest, Hands-On Science Center. The 19 exhibits that made up "Summer Smart Play" are part of what will become an expanded children's science and engineering gallery set to open January 2018.





# Global Connections

#### TRAVELING EXHIBITS

The Center's "Gateway to Space" exhibit spent 2016 traveling the globe to give visitors a representation of the Huntsville campus' vast collection of space hardware and history. Stops in 2016 included Brussels, Belgium, Budapest, Hungary, and Johannesburg, South Africa.



70  $_{\mathsf{Team}}$ 

18

States & Puerto Rico

5 Foreign Countries

NASA Human Exploration Rover Challenge

High School Division - First Place: Rafaelina E. Lebron Flores of Patillas, Puerto Rico

University Division - First Place: Purdue University Calumet



9 University Teams

\$50,000 Prize

..\_-

Mars Ascent Vehicle Challenge Prize

University Division - First Place: North Carolina State University

# Museum Events







+5,000

Each year, the Rocket Center offers free admission during Smithsonian's Museum Day Live! In 2016 more than 5,000 people attended.



#### Mars Masquerade

For the first time the Rocket Center hosted a New Year's Eve event, giving guests the opportunity to ring in the new year under the Saturn V Moon Rocket.



#### Pour Your Heart Out

For the second sold-out year, guests celebrated Valentine's Day at the Rocket Center's Pour Your Heart Out event.





# IMAX®

LUCASFILM

19% Attendance

5% Concessions

of total movie attendance
Star Wars: The Force Awakens







# Education Programs

2016 was a pivotal year for the education programs at the Rocket Center and Space Camp. The education team is laying the path for the future with curricula that focuses on Mars, pilotless flight and the integration of human and robotic technology.





### PASS THE TORCH



Jean Wessel Templeton and Linda J. Smith have generously sponsored the Pass the Torch speaker series at the U.S. Space & Rocket Center since 2011.

#### Presenters

"The Greatest Space Generation", author panel

Dr. John Morse, CEO of BoldlyGo Institute, "NewSpace Science"

**Dr. Tyson Bailey Littenberg**, **astronomer**, "The Dawn of Gravitational Wave Astronomy."

# Rocket Center Dining





Mars Grill- In 2016, the Rocket Center made major renovations to Mars Grill to improve the public's dining experience. A new ordering process moves customers more quickly through the grill as they choose from an array of fresh-food options. Along with an extensive salad bar, Mars Grill now offers a build-your-own burrito bar and daily specials. A grab-and-go section provides guests with food service option any time the Center is open. The redesign of Mars Grill "fulfills Dr. Barnhart's dream of providing a quality dining experience for the customer in a cost-effective way," said Executive Chef Clementine deRoode.



Weeks of Friends, Authentic German Food and Beer and Local Brews

+19,800 Number of Guests

+17,300 Donations to Charities



# Media Events







### As Seen on TV





















The U.S. Space & Rocket Center was Mission Control for the second season of the space-themed, animated series, "Space Racers." The Rocket Center developed educational and professional development material for the series, which is financed through a cooperative agreement with NASA.

# **Print & Social Media**





