



"The first person to step foot on Mars is in school right now, and it could all start with your smile as they hand you their planetarium ticket."

# - Jeff Nee,

Education Specialist, Jet Propulsion Laboratory, NASA





#### Empowering Future Space Explorers at RVCC Planetarium

We live in a time when quality science education is more important than ever and a scientifically literate public is an essential part of the progress of any community. Planetariums both inspire and educate people of all ages about our place in the Universe. They are often a place in which young people become enthused and inspired to follow a scientific career. Many of today's leading scientists, engineers, and astronauts chose their careers because they were captivated by the experience of a planetarium visit.

There has also never been a greater need to rally the philanthropic community—corporations, individuals, private foundations and local organizations—in support of the RVCC Planetarium. That's because a significant infrastructure "reboot" is required to help this amazing local asset keep pace with the rapidly evolving technology needed to provide a dynamic, vibrant user experience.

We invite you to be part of shaping the future! Join us in supporting the Raritan Valley Community College Planetarium fundraising campaign: **Stars are Rising.** Help us ignite the passion for science and space exploration in the hearts and minds of our rising stars!!





## The RVCC Planetarium and Science, Technology, Engineering & Math

The RVCC Planetarium plays a vital role in Science, Technology, Engineering, and Mathematics (STEM) education for students and citizens of Central New Jersey. It reveals a magnificent simulation of starry skies and other immersive scenes that create vivid and exciting educational experiences to entice and effectively enable people to learn about the universe of which we are part. Experiences in a planetarium can contribute to improved outcomes in traditional school settings. Moreover, students are more likely to choose STEM activities, classes, and careers after their planetarium experience. Planetariums are among the most durable, versatile, and cost-effective of educational tools. Worldwide, planetariums are the classrooms and theaters of public science education that have served countless people during the past century.



## **But Help is Needed**

The RVCC Planetarium's SkySkan Digital Sky 2 system currently in use was installed in October, 2008. Today, the video images look washed out. The computers that power the system can't process information fast enough to keep a show running; often, the software needs to be restarted multiple times before the audience is brought into the room, or restarted during a show. Technology has grown in leaps and bounds since the current system was installed. There are more options available with new technology that would keep the Planetarium current and competitive. In short, the RVCC Planetarium is not providing its audiences with the high-quality visual and audio experience they expect when visiting a tech-enriched museum.

Updating the RVCC Planetarium projection system, lobby, and exhibits will allow it to engage more visitors with a variety of learning modes, immersive and interactive engagement, and will:

- · Stoke curiosity with hands-on exploration.
- Appeal to diverse learning styles with a multi-sensory approach.
- Increase authenticity via experiential learning.

# Investment Needs: \$400,000

There are four areas of critical need, described as follows:



\$250,000 will allow the RVCC Planetarium to change out all outdated video projectors and computers. The ability to see clean, crisp images on the dome is critical—but not possible given our current technology.

\$65,000 to upgrade the look of the lobby. The East Building was constructed in 1972, and not much has been done to the lobby in the intervening years. Needs: new floor, new walls, new ceiling, new lighting, new cabinets for the gift shop, new floor in the tunnel.

\$35,000 to upgrade the sound system. Seeing a show is a multi-sensory experience. If the sound is not a good quality, it will decrease a visitor's overall experience (and they won't necessarily think to return for another experience). Upgrading our sound system can also allow for us to add "assisted listening" devices to our theater, something we don't currently offer.



\$50,000 (5 shows x \$10,000 each) to provide five, fully animated NEW planetarium shows. The Planetarium has been running some of its full-dome shows since 2008; new, more appealing content on current topics like black holes and climate change would be a huge improvement.



# **How You Can Help**

We are seeking to raise \$400,000 through every available channel and resource—from within our home communities and well beyond. Gifts of all sizes are critical to this campaign. And while every dollar counts, we're especially interested in transformational generosity—leadership gifts that can make an appreciable impact and inspire others to step up as well.

We are also available to discuss unique **partnerships**, **sponsorships**, and **naming opportunities**, of all kinds. This is an excellent opportunity to both make your mark at **RVCC and establish a lasting legacy**.

# Why Your Support Matters

To continue providing exceptional educational programs, awe-inspiring shows, and hands-on experiences, we need your support. Your contribution to our **Stars are Rising** fundraising directly impacts:

- **STEM Education:** Inspiring the next generation of scientists, engineers, and astronauts.
- **Inclusivity:** Ensuring that every young mind, regardless of their background or resources, can access our programs.
- **Cutting-Edge Learning:** Equipping our planetarium with state-of-the-art technology for immersive experiences.
- **Future Pioneers:** Fostering the dreams and ambitions of young space enthusiasts who aspire to explore the cosmos.

# How You Can Make a Difference

- **Donate:** Your generous contribution fuels our mission. Every donation brings us one step closer to achieving our fundraising goal and to more effectively nurturing the space explorers of tomorrow.
- **Attend Our Shows:** Bring your family and friends to our captivating planetarium shows. Your ticket purchases directly support our educational initiatives.
- **Spread the Message:** Share our mission with your friends and on social media. Encourage others to support this important fundraising initiative.
- **Volunteer:** Become part of our dedicated team and help us create unforgettable experiences for our young visitors.



# **Some of Our Biggest Fans!**

August 2022, Brenda Kennedy, public show visitor: Wonderful Staff and experience for my Summer Campers. Very interactive and educational. The price is so reasonable. Run don't walk to RVCC. HIGHLY RECOMMEND!

April 2023, anonymous First Grade Teacher, Mendham Township Elementary: The trip was well organized and the kids had a lot of fun! The shows and the scavenger hunt were very informative. The kids really enjoyed exploring the models of the space shuttle and taking pictures in the lobby.

April 2023, anonymous PreK Teacher: You were very organized, check-in was smooth, and we liked how you had the scavenger hunt for the children to work on while they waited for their classmates to arrive. We enjoyed eating in the cafeteria, and we appreciated the help finding it! Everyone was friendly, knowledgeable, and welcoming! June 2023, anonymous Third Grade Teacher: This was our first trip to the planetarium and the kids loved it! Thank you for being so organized in every way! We will definitely come back!

June 2023, anonymous Special Needs High School Teacher: Thank you for being so accommodating and wonderful with our students!

July 2023, anonymous public show visitor: I very much appreciated the updated visuals from the James Webb telescope and the SETI update about the Areceibo telescope mentioned in video. More of these timely updates would be helpful.

July 2023, anonymous Preschool Summer Camp Director: It's perfect! We LOVE RVCC!





## ABOUT THE RVCC PLANETARIUM

A brief history: Somerset County College, the forerunner to what would become Raritan Valley Community College, planned for a planetarium right from its inception. When the East Building was constructed in 1972, a "Spitz dome" was installed in one of the lecture halls. In 1987-88, President Charles Irace and the College's Board of Trustees decided they needed to complete the planetarium. A planetarium director, Jerry Vinski, was hired to oversee construction.

**1990:** The "RVCC Planetarium" opened with a Spitz 512-star projector, two Sony video projectors, and several dozen slide projectors and special effects projectors. At that moment, the RVCC Planetarium was 'state of the art.'

**2008:** The RVCC Planetarium upgraded to a SkySkan DigitalSky2 full-dome video projection system, becoming the first digital planetarium in New Jersey.

**2017:** The old seats were replaced, steps were removed and replaced with sloped flooring. The Planetarium's dome was painted for a second time.

## 2023-24: Stars are Rising campaign is launched.





**Total attendance:** Since opening, some 600,000 guests of all ages have come to the RVCC Planetarium. Each year, approximately 15,000 school and camp visitors, and another 6,000 "general public" guests experience the RVCC Planetarium.

## From July 1, 2022 through June 30, 2023, 68% of visitors were from Pre-K – 4th Grade. Some 70% of all guests came from four counties: Somerset, Middlesex, Union, and Hunterdon.

#### **Content for shows:**

- Every live show is a little different from the one before. The Planetarium is constantly adding still images or small video clips when possible to present science updates.
- The Planetarium has created hundreds of laser songs, mixed into dozens of laser concerts. Music genres vary, from shows for preschoolers to current pop songs, to hits from the 1960's, 1970's and 1980's.
- Shows written and produced in whole or part by RVCC staff include Rockin' Rocket Ride, Follow the Drinking Gourd, Skies over Hogwarts, Mystery at the North Pole, Spooky Skies, Romancing the Stars. In addition, the RVCC Planetarium provides monthly "Astronomy Tonight" live updates.
- The "Sky Above" is a sensory-friendly show for autistic visitors. It was designed in conjunction with special education teachers and includes astronomy information, music videos, laser songs, and storybooks. It is presented on a Kindergarten level, and though it is advertised as a program for autistic visitors, we find that many neuro-typical children enjoy the show. It works well as a first introduction to a theater and planetarium experience.



### FADING FROM THE PACK: RVCC Planetarium and the Regional Context

The RVCC Planetarium staff are leaders in the state, regional, and international planetarium communities. Former Planetarium Director, Jerry Vinski, was president of the Middle Atlantic Planetarium Society (MAPS) for six years. Current Planetarium Director, **Amie Gallagher**, has been Secretary of MAPS for six years. She also coordinates regular meetings for New Jersey planetarians. All full-time staff have presented talks and workshops at conferences locally, regionally, nationally, and internationally.

The SkySkan Digital Sky 2 system currently in use was installed in October, 2008, when we were recognized as having the first digital planetarium in New Jersey. Within about four years, most of the other planetariums in New Jersey changed from just optical-mechanical star projectors to either all digital or a hybrid (optical-mechanical + digital) system.

- Liberty Science Center opened a state-of-the-art planetarium in December 2017 and upgraded their system in September 2022.
- **The Edelman Planetarium** at Rowan University upgraded their planetarium—which was a digital system originally installed in 2012—in November 2018.
- **The Ocean County College** planetarium's system is also newer than the RVCC Planetarium and they upgraded in 2022.
- The planetarium at the New Jersey State Museum at Trenton did a complete upgrade in the past few years as well.

While the RVCC Planetarium was the first digital planetarium in New Jersey, it is the *only* one not to have had a major upgrade in the intervening years.



## Amie Gallagher, Director, RVCC PLANETARIUM



Amie Gallagher has been the Planetarium Director at Raritan Valley Community College since 2013. She has a Master of Science in Teaching from Fordham University. Amie was the Astronomy Educator and Programming Coordinator at the American Museum of Natural History's Hayden Planetarium from 1992-2000. She taught 5th grade from 2000- 2001 before returning to her passion: planetariums. She has coordinated the astronomy outreach efforts of the RVCC Planetarium since 2001, and has played countless roles: show presenter, gift shop manager, student worker trainer, ticket seller, and "other duties as needed" since 2003. Amie became Planetarium "Director" in 2013, expanding her responsibilities and outreach. She has been an Astronomy Education consultant to planetariums and book and magazine publishers since 1992–fact-checking novels, children's books, texts, articles, and presenting astronomy

workshops to thousands of children and adults around the country. Amie and her husband live in Somerset, NJ, where they raised their two children (and who are now out on their own). Amie maintains quite varied interests, but she especially enjoys hearing about the favorite planets of planetarium visitors!

## Be a Star, Rise to the Occassion!



Please make your donation at: raritanval.edu/starsarerising

or contact

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