A Letter from the President and CEO

This fall, the Institute hosted our annual STEM Student Showcase, an opportunity of students from our programs for underserved youth to demonstrate their projects and research. Three students spoke to our community supporters at the event—an emphasis we place not just on developing STEM skills, but also soft skills like public speaking that will help them in many situations throughout their lives. One student, Kia DaSilva, talked about helping to create a virtual reality model of the solar system to bring stars into the classroom. “I expected to quit within a month or two,” she said, “but instead I found myself researching astronomy in my free time. The Franklin Institute had worked its magic, and I was here to stay.”

Providing experiences that draw in young students like Kia, adults curious about new technological advances, and families searching for wonder and inspiration, is what we do best. Among the many highlights of 2016, we launched the Institute’s first mobile app and a suite of virtual reality experiences unmatched by any other museum or science center in the world. You can download the app for free and watch exclusive VR content at home (see p. 3 for instructions) or come in to try our new Holodeck and test the latest in high-end VR headsets. From swimming with blue whales to flying through outer space—this is “magic” you have to experience to believe.

By the end of this year we will have welcomed nearly 200,000 students on field trips, and invited them both to explore our exhibits and to become a part of one of Philadelphia’s great cultural institutions. When they walk up our front steps and stand in front of the marble statue of one of our nation’s first inventors, Benjamin Franklin, we send them the message that this world of discovery, curiosity, and learning is theirs for the taking. And we hope that, like Kia, you will find a place in that world to stay.

We could not do this important work without your support. You make it possible to directly reach more than one million people each year here in the building, in neighborhoods throughout the city, and in schools throughout the region.

As 2016 draws to a close, we are looking to the future. In eight short years, in 2024, the Institute will celebrate its 200th birthday. By that time we hope, with your continued support, and with the guidance of our committed Board of Trustees, to reach even more people, and to make an even greater impact in accomplishing our educational mission, and advancing Franklin’s legacy. I’ll share more about our plans for the future in the new year, but until then, please accept my heartfelt thanks—the accomplishments and celebrations recorded in these pages are yours to share.

I wish you a wonderful holiday season, and a very happy 2017.

Larry Dubinski
President and CEO

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Virtual Reality & Mobile App Launch

The Franklin Institute’s very own app is available to download for your iPhone or Android device!

This mobile experience is designed to make your time at our museum even more enjoyable and help you experience science from just about anywhere on Earth.

- Plan your visit with exhibit descriptions and general information about the museum.
- Find a daily schedule of our live science shows, movies, and hands-on activities.
- Navigate the museum with an interactive map that gives you step-by-step directions to each exhibit and museum feature.
- Explore a library of virtual reality experiences that transport you from the deep ocean to the flight deck of a space shuttle.
- Get the most out of your member benefits with special membership tools, including digital storage for your membership card.

Visit www.fi.edu/mobile to download our app today!

The Franklin Institute’s mobile app has been supported by an Advancement grant from The Pew Center for Arts & Heritage.

Captions

1. A drone whizzes around the Benjamin Franklin National Memorial, creating a 3D scan of Franklin Hall.
2. Guests watch app-based virtual reality with the Franklin Institute’s Google Cardboard to continue their virtual reality explorations at home. Virtual reality is now a permanent feature at the museum, with our Virtual Reality Demonstration space highlighting the Oculus Rift and HTC Vive, and headsets embedded in Space Command, the Giant Heart, and Your Brain.
3. A guest tries out the Oculus Rift while Steve Thorne of Thorne Media observes.
4. Mark Mills and Bill Sigmund.
5. Charles Falconer, student at Penn Nursing Science, demonstrating how virtual reality is used in CPR training.
6. Sara Khadar and Andrew Porter.
7. Jared Melzer and Brynn Zech with TE Connectivity.
8. A guest experiences the HTC Vive virtual reality experience.
On September 7, The Franklin Institute removed the 1930 Budd BB-1 Pioneer Airplane from its post in front of the building and sent it away for a much-deserved restoration. Created and tested right here in Philadelphia, the Budd plane was the first to be constructed entirely from stainless steel. It logged a whopping 1,700 air-hours in both the United States and Europe, where it flew over the Alps twice in a round-trip voyage between France and Italy. A gift from the Budd Manufacturing Company, the Budd has greeted guests and passersby in front of the Institute since 1935, inspiring generations with the science and wonder of flight. Members of the press and public gathered for remarks and refreshments as we sent off this piece of history and eagerly anticipate its return home in 2017. Be sure to look for future messages announcing the Budd’s return to its place of honor here at the Institute.

Lisa D. Kabnick & John H. McFadden and Alfred (Fred) Hagen & Hagen Construction, Inc. generously made the cleaning of the Budd airplane possible.

Robot Revolution Breakfast

The Budd Will Soar To New Heights!
On October 5, the Institute presented its annual STEM Student Showcase, during which many of our supporters had the opportunity to see our students in action. The students led live demonstrations in and around Franklin Hall showcasing sheep brain dissections, controlling the new PACTS program’s robots, and more.

As part of the evening, hardworking and talented students shared their experiences in the Institute’s youth programs. As a 12th grade STEM Scholar, Jerrin Jacobs aspires “to give back to the environment and learn about how [he] can make a cleaner impact on the earth.” Nile Bayard, a junior in the PACTS program, recalled that “from the solar system and outer space, to microbes and anatomy, that [first] summer [he] saw just how vast and incredible the world of science is.” Lastly, Science Leadership Academy senior Kia DaSilva exclaimed that “There is a science kid in every kid, and [she is] proud to be a part of a group that recognizes that in such an exemplary fashion.”

These programs and the students within them lie at the center of our mission to inspire a passion for learning about science and technology. These graduates will go on to better their communities and encourage others to do the same. Thank you to all who support them and we look forward to seeing you at next year’s STEM Student Showcase.

Volunteer Spotlight:
Tom Twardowski

Volunteer Tom Twardowski has been involved as a science presenter at the Institute for ten years. Five years ago he helped to organize the now annual Plastics Chemistry Fair, a celebration of the varied uses of plastics. With the support of the Museum Programs Department and the Philadelphia Section of the Society of Plastics Engineers, Tom has helped this event grow to an experience engaging over 100 volunteers in support of activities throughout the museum. “It’s humbling to see the impact this event is having on both the people I recruit to volunteer and the visitors who attend that day,” Tom explains.

Dr. Twardowski has an undergraduate degree in chemical engineering and a PhD in material science engineering from the University of Illinois. He has been a teacher and university professor for more than 15 years and is currently a scientist in Integrity Life Sciences. He credits the Museum Programs Department staff for being patient, supportive, and displaying an internal optimism that showed him how to have fun while working to make his message available to wider audiences of all different levels. “It’s one thing to teach students,” he said, “it’s another thing entirely to share your knowledge with the public. The Programs Department provides the support and encouragement that makes a volunteer want to contribute.”

Your Gift Makes TWICE the Impact!

We are pleased to share that The Franklin Institute Board of Trustees agreed to make a generous $200,000 matching challenge! This means that between now and December 31, your contribution of any amount to the Franklin Fund will double, dollar-for-dollar. Together, we can make an even bigger difference by contributing up to $400,000 towards science and technology education!

Your support enables the Institute to provide our Student Access Program. The program provides free or highly discounted field trips and a range of middle and high school educational programs, including STEM Scholars and PACTS students. These initiatives specifically target underserved youth, empowering them to strive farther in their education and to reach their true potential.

We value each and every gift, as it allows us to maintain these programs and reach the many students and their families as possible. If you would like to make a gift, please use the attached envelope to make a tax-deductible contribution today.

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Welcome New Trustees!

**Yvette D. Bright**

Yvette D. Bright is executive vice president and chief operating officer at Independence Blue Cross (IBC) in Philadelphia. Prior to joining IBC, a strong corporate supporter of The Franklin Institute for more than 30 years, Bright held several positions in marketing, training, and consulting services in the United States and United Kingdom. Bright has served on the board of the Walnut Street Theater as well as the senior vice president at the Philadelphia Children’s Theater. The National Multiple Sclerosis Society recognized Bright for local business leadership, and she received the Candace Award for Women of Achievement from the South Jersey chapter of the National Coalition of Black Women. Bright has also received the Philadelphia Business Journal Women of Distinction Award. Bright graduated from Tulane University School of Engineering, completed post-graduate course work at the London Business School, and received her MBA in health care management from Saint Joseph’s University.

**Richard Henriques**

Richard Henriques is a senior fellow at the University of Pennsylvania’s Center for High Impact Philanthropy with a joint appointment by the Wharton Social Impact Initiative. In 2016, Dick served as chief financial officer at the Bill & Melinda Gates Foundation and was formerly senior vice president of finance and corporate controller at Merck & Co. Inc. In addition to his work at Penn, Dick currently serves as a board director for Arbutus Biopharma, Episcopal Community Services, and the Moyer Foundation and advises several early stage social sector, philanthropic, and consulting organizations. Dick also serves as a Trustee for the Pennsylvania State Chapter of the Nature Conservancy.

**Elaine C. Levitt**

Elaine Levitt has been actively involved at The Franklin Institute since 1984, serving on The Franklin Institute Awards Friends Committee since 1999 and as a Trustee from 1996–2004. Levitt is a longtime member of Philadelphia’s philanthropic community—together with her late husband Joel Gershman they established the Joel and Elaine Levitt Trust in 1998. She is an advisory member of the Friends of Rittenhouse Square and has served on several area boards, including the Israel America Foundation, Inc., Friends of Rittenhouse Square, the University of the Arts, the National Liberty Museum, and the Gershman Y. Levitt has a strong background in science, graduating from Cornell University with a BS in science, and holds a master’s degree in business from Saint Joseph’s University.

Thank You, Corporate Supporters!

The Franklin Institute recognizes the dedicated corporate supporters with whom it has formed strategic alliances. The support provided by the following organizations helps to make possible exciting exhibits, educational programs, and special events.

The Franklin Institute thanks the following companies for their generous annual support, showing commitment to sustaining and advancing STEM education and supporting its mission throughout the greater Philadelphia region and beyond in 2015 and 2016 to date. Those giving at the $5,000 giving level and above are:

### Proud Corporate Partners

**Anonymous**

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Brooke Anderson
Bruns & McDermid Engineering Company
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CSS/Philly

The Board of Trustees also welcomes ex-officio members Otis Hackney, chief education officer for the City of Philadelphia, representing Mayor Jim Kenney, and Michelle Singer, executive director of political affairs at Comcast, representing Governor Tom Wolf.

Please find a full listing of members of the Board of Trustees on page 4.

Save the Date

**February**

Speaker Series—Jack Horner, paleontologist and Jurassic World collaborator—date to be announced

**April 21–29**

Philadelphia Science Festival

**May 1–4**

Awards Week

Follow us on social media!

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### Electricity Exhibit

**Robot Revolution**

**Your Brain**

**The Science Behind Pixar**

**Traveling Science Shows**

### Bank of America

**Awards Ceremony and Dinner**

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**Awards Ceremony and Dinner**

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Science of Wine

The annual Science of Wine event, hosted this year by Trustee Karen Zimmer and her husband Gary, welcomes members of the Institute’s community of supporters to learn about tannins, our tastebuds, and more.

1. Bruce and Andrea Freundlich
2. Nazanin Ghobadi
3. Richard and Diane Woosnam
4. Gary and Karen Zimmer with Larry Dubinski
5. Homayoon Pasdar, Nazanin Ghobadi, and Cheryl Pasdar
6. Terri Malenfant, Janice Gault, and Carol Wells
7. Cheryl and Kevin Roller
8. Otis and La-Toya Hackney
9. Bill Nessler, Sherrin Baky-Nessler, and Bob Swayne