Message from the Chair

Dear Friends of the Foundation,

The end of the year brings with it a chance to reflect on accomplishments and to look ahead to the future. As I reflect on what each of you have helped the Foundation to achieve for our stakeholders and as an organization this past year, I am profoundly grateful. Our achievements prove that the Foundation represents the best of our industry and what we can accomplish by working together. I look to the future full of hope. Hope in math as a universal language that provides a bridge to opportunity. Hope in the determination and creativity that exists within our industry. Hope in our programs and the critical education gap that they are filling. I know we will continue to find a wealth of opportunities for positive change in our communities. The pages of this newsletter are full of examples of how we are making a difference.

1. Our new Expect the Unexpected with Math® modules and Hardest Math Problem Student Contest are making math fun and relevant for the next generation of actuaries.

2. We welcomed a new community of up-and-coming performers to the profession with our 2022 scholarship recipients and our first cohort of STEM Stars Scholars.

3. Our Math Motivators tutoring program continues to expand to new communities, increasing students’ math proficiency and self-efficacy.

4. Thirteen universities are helping us to expand our Modeling the Future Challenge to more students in more places nationwide.

5. Our Gala Committee is working with staff to create a compelling and memorable Formula 2023 Virtual Gala: Multiplying the Power of Math & Diversity.

These achievements are just the beginning of what we can accomplish working together. As we look ahead to 2023, my hope is that we continue to use our creativity and resources to continue to grow and serve our communities in remarkable ways.

My heartfelt thanks to our individual donors, corporate sponsors, and volunteers who make all of our work possible. To my fellow Trustees and staff, I thank each of you for your support and your dedication to the mission of The Actuarial Foundation. On behalf of the entire Board of Trustees, I wish you and yours a happy and healthy holiday season and a prosperous 2023!

With gratitude,

Jeffrey Johnson, FSA, MAAA

Calendar of Events

February 15-16, 2023
The Actuarial Foundation Board of Trustees Meeting

February 26 – March 1, 2023
ReFocus Conference

March 22, 2023
Modeling the Future Challenge Finalist Announcement

April 24-26, 2023
SOA Life and Annuity Symposium

April 25-27, 2023
Modeling the Future Challenge Virtual Symposium

May 11, 2023
The Actuarial Foundation Formula 2023 Virtual Gala

May 7-10, 2023
CAS Spring Meeting

Save the Date

The ACTUARIAL FOUNDATION Presents
Multiplying the Power of Math & Diversity

Formula 2023 Virtual Gala

THURSDAY - MAY 11, 2023
5:00PM - 6:00 PM CT

See more on page 4
Changing Lives with Math Education

EDUCATION

The Hardest Math Problem Student Contest is live!
Through the Hardest Math Problem Student Contest, we have engaged thousands of students in grades 5-8 across the country. This annual contest produced with educational partner Scholastic and generously sponsored by the New York Life Foundation features grade-specific story problems that present challenging math concepts in real-world scenarios. The 2022-2023 Challenge 1 opened September 15 and as of this printing, we are up to 260 student entries. Challenge 1 closes December 5, 2022. Challenge 2 opens by invitation only to Challenge 1 winners on January 27, 2023. This year’s theme focuses on food sustainability.

Modeling the Future Challenge
Registration for the 2022-2023 Modeling the Future Challenge (MTFC), our math-modeling and data-analysis competition for high school students, closed on November 11 and we have 232 teams registered, up 22% from last year. The three-phase competition challenges high school students to make the best recommendations to companies, organizations, or government agencies based on their own mathematical modeling of future trends and risk analysis. After passing a rigorous qualifying scenario by answering a set of questions related to a real-world data set, the qualifying teams conduct a research and analysis project about a topic of their choice. The teams compile a final report of their research. Students who qualify for the Project Phase of the Competition have access to an actuarial mentor to answer questions and guide them through their research. Actuaries are also involved in the review of student reports and the selection of finalist teams. These finalist teams are then invited to compete for $60,000 in scholarships and prizes at the annual Symposium, which will be held April 25-27, 2023.

Don't forget to join us for the Semi-Finalist announcement on December 12th where you are sure to see a snapshot of unique team names and project ideas!

Modeling the Future Challenge University Partner Workshops
We collaborate with universities across the United States to help high school students take the next steps in their mathematical careers. To date, we have thirteen university partners. This year, we have been lucky enough to have six of our partners host workshops. Over 400 students attended these events and had a chance to tour university campuses, talk with professional actuaries and actuarial students, and work through an MTFC scenario in preparation for this year’s Challenge. As one professor said, these workshops are helping to spread the word about the Challenge and more importantly, the need for more math-skilled workers.

“Many businesses in Maine and throughout the country need professionals with top-level mathematics skills to help them be successful today and meet the challenges of the future. Attracting students to math-based careers like actuarial science needs to start early, and my hope is that this is just the beginning,” said Lori Koban, UMF professor of mathematics and director of UMF’s Actuarial Science program.

Special thanks to California State University, Fullerton; University of Maine at Farmington; Bentley University; Iowa State University; Trine University and Auburn University for their help in bringing these workshops to local high school students.

Two New Math Workshop Modules Launching in January 2023
We are excited to announce the launch of two new Expect the Unexpected With Math® Math Workshop modules. First, the expanded Ecosystem module will include new animals, allowing students to choose new paths and replay the module multiple times. The Escape Math module tasks students with finding clues and using math in order to escape a museum earthquake.

Our own Nichole Semprit addresses high school students at the University of Maine, Farmington.
EDUCATION

Math Motivators Expands in Des Moines, IA
In 2019-20, we brought our Math Motivators program to 20 students in one of the five comprehensive high schools in Des Moines, Iowa. In 2021-22—two years later, and two pandemic years at that—the program was implemented in four Des Moines high schools, where 30 trained volunteers provided in-person algebra tutoring to 55 students, and an additional 18 high school and five middle school students in Des Moines received tutoring through our virtual tutoring center.

The Math Motivators program not only increases students’ math proficiency, it also increases students’ self-efficacies and identities in mathematics. For example, one parent shared the following with us about her daughter: “MiVida ... was eager to sign up for an after-school algebra class that will give her high school credit so she’s able to go straight into geometry starting in 9th grade. I feel that by her taking the Math Motivators after school tutoring gave her the confidence to apply for this algebra class, so thank you all for all your help!”

In fall of 2022, Math Motivators is set to providing tutoring at all five Des Moines comprehensive high schools, and we are expanding the program to Des Moines middle schools, in addition to providing support to students through our virtual tutoring center, meaning that we will serve well over 100 students in Des Moines in 2022-23.

SCHOLARSHIP AND REIMBURSEMENT PROGRAMS

An Extraordinary Year for Scholarships and Reimbursement Programs
The Foundation awarded 77 college students with $230,500 in scholarships for 2022. Here is the distribution of students receiving each scholarship:

- Actuarial Diversity Scholarship—59
- Actuary of Tomorrow Stuart A. Robertson Memorial Scholarship—6
- Caribbean Actuarial Scholarship—3
- Curtis E. Huntington Memorial Scholarship—9

“I am writing to express my sincere gratitude to you for sponsoring the Actuarial Diversity Scholarship award. Becoming an actuary has been a dream of mine for quite some time now, and I am one step closer to reaching my goal. With the scholarship, I will be able to have more freedom with my degree, allowing me to study more statistics and real-world application of math, which I feel will prepare me more for my future as an actuary.” – Danielle Ryans, 2022 Actuarial Diversity Scholarship Recipient

One individual making a career change to the actuarial profession was awarded with the Actuary – A Career Change: Elizabeth M. Mauro Reimbursement Program. Congratulations to Dr. Indu Rasika Churchill, who is an assistant professor in mathematics at SUNY Oswego. She recently started her career change having just passed exam FM in December 2021.

STEM Stars Actuarial Scholars Program
In addition, we announced our first cohort of STEM Stars Scholars earlier this year. These twenty students will receive a scholarship of $20,000 ($5,000 renewable annually) along with mentoring, tutoring, immersion experiences, and exposure to internships and job-shadowing opportunities.
Save the Date for Formula 2023: Multiplying the Power of Math & Diversity
May 11, 2023 | 5:00PM CT
Join us virtually for a night of celebration as we work to enhance math education and financial literacy, and advance diversity, equity and inclusion.

Our Gala Committee is vetting speakers and planning an inspiring program, so please stay tuned to the Formula 2023 website for the latest updates: https://gala.actuarialfoundation.org/

Registration is Open Now! Register FREE to attend Formula 2023’s Virtual Gala and you will be automatically entered into a drawing to win an Apple Watch, Cameo Gift Card or Delta Airlines Gift Card!

Thank you to our Formula 2023 Virtual Gala Sponsors:

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GivingTuesday 2022
GivingTuesday is a global movement unleashing the power of radical generosity. On November 29, we marked this day of giving with a campaign supporting the Modeling the Future Challenge (MTFC). Your support is an investment in the next generation of STEM leaders. The one-of-a-kind Modeling the Future Challenge competition introduces hundreds of talented high school students annually to the work of actuaries as they conduct an actuarial research project and make recommendations based on their own mathematical models, real-world data analysis, and risk management. They learn how mathematics applies to cutting-edge industries and technologies while also learning more about the actuarial profession and other STEM-based careers.

There’s still time to support tomorrow’s leaders! Visit www.actuarialfoundation.org/givingtuesday-donation/ and make your donation today. Thank you for your generosity!

Now Accepting Donations of Cryptocurrency
We are excited to share that we are creating greater impact through innovation this year. To help us reach more students, teachers and families with critical math education and financial empowerment programs and resources, we are now accepting donations of over 90 different cryptocurrencies. Help us build the skilled math thinkers who will be tomorrow’s leaders by donating crypto today. https://www.actuarialfoundation.org/donate-crypto/

We’re proud to be a Thrivent Choice®-enrolled organization.
Calling all Thrivent clients with membership! Did you know you have several programs through Thrivent membership benefits that make generosity easy?

Through Thrivent’s programs, we are eligible to receive grant dollars and fee-free donations. Please take this opportunity to help us advance math proficiency throughout the country!

To learn more about Thrivent’s membership benefits and generosity programs, visit thrivent.com/generosity
Highlights from the 2022 Annual Meetings
For the first time since 2019, the Foundation had an in-person presence at the 2022 SOA, CCA, and CAS Annual Meetings. We thoroughly enjoyed reconnecting with everyone!

SOA ImpACT Conference
Thank you to all those who stopped by our Inspiration Station at the 2022 SOA ImpACT Conference in Orlando in October. We enjoyed speaking with many of our donors and volunteers, as well as others interested in learning more about our work. While there, guests enjoyed a golf putting challenge, were able to test their knowledge about our work, and could enter a raffle for an Amazon Gift Card. Stories about our students’ success were also featured to demonstrate the impact you, our donors and volunteers, are making each day.

CAS Annual Meeting
We enjoyed meeting donors, volunteers, and program recipients at the 2022 CAS Annual Meeting in Minneapolis in November. Daniel Polites, a 2022 Robertson Scholarship Honorable Mention recipient dropped by to share how much he appreciates the scholarship and our support. Our programs would not be possible without the generosity of our donors.

CCA Annual Meeting
We appreciate all those who dropped by our table to show their support for the video shared during the Business Session and Keynote Presentation. Foundation Trustee Steve Eisenstein introduced the video saying, “We have been consistently inspired by the commitment to the Foundation’s mission from the CCA and from each of you. I’m honored to introduce a video that highlights some of the impacts from our programs this past year. Your generosity has made brighter futures possible in communities nationwide.”

You Inspire Us! Thank you for your continued support.

Back-to-School Campaign Raises over $30K
It’s no secret that the number of students who need math tutoring across the country far surpasses the resources of a single program like our Math Motivators program. That’s why earlier this year, we launched a Back-to-School Campaign to give as many students as possible access to free tutoring. With a generous commitment to match campaign contributions up to a total of $10,000 by Emeritus Trustee Dave Hartman, we raised $31,390. We are extremely grateful to Dave and to all of the donors who gave to the Back-to-School Campaign. Thank you for helping us build a future where EVERY young person, regardless of where they live, goes back to school ready to succeed.
Creating Brighter Futures With Math

Corporate and Foundation partnerships help us develop and provide math education and financial literacy resources, fund scholarships, and promote lifelong math education. Thanks to all of the companies and foundations below whose support makes our work possible.

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Builder- $5,000+
AON
Casualty Actuaries of New England
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*indicates multi-year commitment

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