Message from the Chair

Dear Friends of the Foundation,

Reflecting back on 2020, I choose to focus on gratitude and silver linings --- it’s in my DNA and “Courageous Positivity” is my personal mantra. Thanks to each of you, our Foundation has pivoted seamlessly to serve our Mission with a bold spirit of innovation and “Can Do”! TAF is making an active difference and I am profoundly grateful and honored to navigate with each of you on this brave new journey.

Throughout the pages of this newsletter are highlights of how our leadership, staff and volunteers have embraced and conquered the digital landscape to innovate and make our programs available virtually to more students, parents and teachers across the country. Below are a few examples of how the Foundation is fulfilling our mission of enhancing math education through the talents and resources of actuaries.

• The latest Hardest Math Problem Student Contest (shout-out to actuary Joshua Becker for his terrific support in writing the problem) shows middle school students how to use data and write a mathematical argument.

• We are intentionally promoting diversity, equity and inclusion in all of our efforts and specifically encouraging students to enter the actuarial profession by awarding 87 Foundation scholarships.

• Our Math Motivators program is now offering virtual tutoring in over 30 sites with close to 80 in the works!

The immense generosity of our individual and corporate donors makes our work possible and I am truly thankful for this needed support, especially this year! I also want to offer BRAVOs to each of our selfless Foundation volunteers who have been so dedicated with their time and commitment to making our programs available even in the remote learning environment. Our leadership and staff have been tireless in their dedication to creating more possibilities for more students throughout the year. I extend my heartfelt and deep gratitude to each of you.

I send my personal best wishes to all of you and your families to remain safe, strong and well in this joyous holiday season. Here’s to a healthy 2021, filled with more learning, more kindness and more hope and even shinier silver linings for The Actuarial Foundation.

Cheers to you,
Margaret Resce Milkint

Happy Holidays from all of us at The Actuarial Foundation!
Changing Lives with Math Education

EDUCATION

Expect the Unexpected with Math

During this time of remote learning, we have seen a 113% increase in page views in March 2020 compared to March 2019 on our Math Workshop modules! The latest module was recently launched to Scholastic’s database of over 400,000 middle school math teachers and students. If you know of parents or teachers in need of free math resources, you can send them here: www.scholastic.com/mathworkshop/login/index.html

The Hardest Math Problem Student Contest

Writing in mathematics is complex. According to the National Council for Teachers of Mathematics, a peer-review activity helps students support a claim and communicate it clearly while keeping the audience in mind. Students participating in our Hardest Math Problem Student Contest are tasked with writing a math argument as a part of their contest submission and actuaries are the ones reading and ranking them. To help these students write proper math arguments, Scholastic and our volunteer actuaries developed a math game called Puzzle it Out: Writing a Math Argument. The storyline has Carlita, our former Hardest Math Problem character, going through the process of ordering ingredients for her signature turkey dinner. She needs to do some conversions to feed a large crowd, and has students assist her with creating a clear and concise math argument to send over to the supplier. Completing the Puzzle it Out: Writing a Math Argument exercise will help students as they prepare their Hardest Math Problem contest submission.

The 2020-2021 Hardest Math Problem Challenge 1 is now open and in it, students will be asked to use data to determine the percent decline, to the nearest whole number, of rusty patched bumble bees (Bombus affinis) from 20 years ago to today. Students who correctly answer Challenge 1 at or above their current grade level will receive an invitation to participate in Challenge 2. We are thankful to Joshua Becker, an actuary at New York Life, for providing us with this year’s competition theme. If you have an idea for a math contest theme, look for a chance to submit your idea this summer. www.scholastic.com/hardestmathcontest/index.html

Modeling the Future Challenge

The Modeling the Future Challenge (MTFC) is a national competition giving high school students the opportunity to develop and present their own mathematical models describing how a new technology or industry might change the future. For the 2020-2021 Challenge, the topic is an open theme, allowing students to pick a topic that is relevant and interesting to them. We provide them with some suggested data sources, but they are also encouraged to research on their own and analyze data just as actuaries do. Registrations recently closed and we have 193 teams registered and working on a scenario to qualify and submit a paper. This is our highest registration since the Challenge began!

This year we are thrilled to announce the development of our Actuarial Process Guide. With the help of our partner, the Institute of Competition Sciences, and the Modeling the Future Challenge Development Committee of actuaries, this five-step method was developed and can be used by students and teachers in high school and college. The Actuarial Process is designed to guide students through the stages of identifying a project topic and completing their research report for the MTFC like actuaries do for their companies and clients. To take a look at the Guide, go to: www.mtfcchallenge.org/wp-content/uploads/2020/07/MTFC_Actuarial_Process_Guide_2020.pdf

Building Your Future Launch Proves Successful

Since its redesign, Building Your Future (BYF), the financial literacy curriculum resource that helps high school students grasp the essentials of personal finance, has had over 47,000 microsite visits and over 28,000 downloads. Our vendor for Building Your Future, YMI, has been measuring students’ understanding of the financial literacy concepts by having them complete pre- and post- tests. The results of these pre- and post- tests show an average of 22.6% increase in understanding across all four of the Building Your Future booklets. www.actuarialfoundation.org/building-your-future/
EDUCATION

An Update on Our Math Motivators Program
Well into the 2020-21 school year, we are still facing learning challenges caused by COVID-19. Many of us feel like this marathon will never end. Instead of dropping off kids at school and waving “goodbye,” most families around the country are hunkered down at home. Students and parents are forced to get acquainted with a jumble of internet learning technologies, troubleshooting virtual classrooms and Wi-Fi connections, and settling into their first-ever fall and foreseeable future with distance learning.

Despite these challenging times, our dedicated team of staff and volunteers have not let anything stand in the way of delivering free math tutoring to underserved communities. We have been busy at work creating new beginnings for Math Motivators students across the country.

Here are some examples:
- We have been working with nearly 80 sites to establish virtual tutoring programs this academic year
- As of October 30, 24 sites have kicked off their programs, 10 sites are scheduled to start in November, and another 10 sites are planning to start the program in winter or early spring

Positive Results from Students Receiving Math Motivators Tutoring
It is really exciting to see the positive impact the Math Motivators tutoring program is having on students from previous years. In 2018, UNUM Group provided a generous grant for the Math Motivators program. With UNUM’s financial and volunteer support, 24 ninth graders at Portland High School received free math tutoring in AY2018-19. Results from an end-of-year survey of students in the program were very encouraging:
- 90% of students indicated that their grades improved
- 80% increased in their understanding of Algebra
- 80% increased in their confidence in math
- 70% increased in their enjoyment of math

We are so grateful to all of our Math Motivators supporters for all that they make possible.

SCHOLARSHIP AND REIMBURSEMENT PROGRAMS

An Extraordinary Year for Scholarships and Reimbursement Programs
The Foundation awarded 87 college students with $233,750 in scholarships for 2020.

Here is the distribution of students receiving each scholarship:
- 68 Actuarial Diversity Scholarships
- 5 Actuary of Tomorrow – Stuart A. Robertson Memorial Scholarships
- 4 Caribbean Actuarial Scholarships
- 10 Curtis E. Huntington Memorial Scholarships

Meet the 2020 Foundation scholarship recipients at: www.actuarialfoundation.org/scholarships/

Thank You, Volunteers
All of the education programs at the Foundation run smoothly thanks to the time and effort of our volunteers. We are grateful to all volunteers who have dedicated their time and made a commitment to the Foundation and to the students, teachers, and schools we serve.

New Software Chosen to Manage Scholarships
As the reach of The Actuarial Foundation grows, we continue to look for technology that can match our needs. After an extensive review process, we have contracted with Submittable as our new scholarship management software platform. This platform is replacing Academic Works and will provide us with the ability to collect and review applicants and track them through their actuarial path with more robust reporting capabilities.

Thank you.
**FUNDRAISING**

*Educate.Connect.Change. - An Update from our Campaign Co-Chairs*

You may recall that the campaign was temporarily paused earlier this year due to COVID-19. This pandemic has dramatically changed the way we live, work and learn. No one and no business—including nonprofits—have been untouched. The academic disruption caused by the pandemic has been well-documented and there remains much uncertainty about how this disruption will impact students overall.

What has emerged for The Actuarial Foundation is a continuous need to be flexible, nimble, collaborative and forward-thinking.

- We pivoted our Math Motivators program to virtual tutoring to make it easier for students to learn and get the free support they need and we’re rolling it out to schools across the nation.
- We worked with multiple vendors to ensure our free, online middle school math resources produced with Scholastic were readily available to teachers, students and parents in need.
- Our Modeling the Future Challenge Symposium will be held virtually again this year, and registrations are at the highest they have been since the Challenge began.
- We spent countless working hours on discussions about diversity and inclusion and how that will play a bigger role in our problems and Foundation going forward.
- See how the Foundation has made a difference by visiting: www.actuarialfoundation.org/remote-learning/

Our goal remains unchanged—to raise $5 million to apply toward solving the persistent problem surrounding math education and financial literacy. Indeed, the need for these resources to ensure the Foundation’s ability to proactively address whatever the future may bring has never been more evident. We are proud to re-affirm our commitment to reaching the $5 million mark!

If you believe in making a difference, especially in these critical times for students, teachers, and educators, we urge you to pledge your support as we continue to shape the future of math education and equal opportunity for all students.

Thank you for your support as our Foundation continues to work on bridging the gap.

*The Foundation Reaches Guidestar’s Highest Seal of Transparency*

The Actuarial Foundation recently announced their achievement of the 2020 Platinum Seal of Transparency, the highest level of recognition offered by GuideStar, a service of Candid. By sharing metrics that highlight progress The Actuarial Foundation is making toward its mission, the Foundation is helping donors move beyond simplistic ways of nonprofit evaluation such as overhead ratios. “In accordance with our long-held organizational beliefs in transparency and accountability,” said Jason Leppin, executive director, “we are excited to convey our organization’s results in a user-friendly and highly visual manner. With a Platinum-level Profile, we can now easily share a wealth of up-to-date organizational metrics with our supporters as well as GuideStar’s immense online audience, which includes donors, grant makers, our peers, and the media.”

To reach the Platinum level, the Foundation added extensive information to its Nonprofit Profile on GuideStar including contact and organizational information; in-depth financial information; qualitative information about goals, strategies, and capabilities; and quantitative information about results and progress toward its mission. By taking the time to provide this information, the Foundation has demonstrated its commitment to transparency and to giving donors and funders meaningful data to evaluate our performance. Visit guidestar.org and search for The Actuarial Foundation to learn more.

*Shop online at Amazon to benefit The Actuarial Foundation*

If you are purchasing holiday gifts at amazon.com, please consider shopping at smile.amazon.com, which donates a portion of your purchases to the Foundation. Visit https://smile.amazon.com/ and choose Actuarial Foundation from the dropdown menu. Thank you for your support!
Highlights from the 2020 Annual Meetings
The Foundation navigated the virtual meeting environment this year with a presence at the 2020 SOA, CCA, and CAS Annual Meetings. We successfully gave a sneak preview of our new Educate.Connect.Change campaign video at each of the meetings. We also had virtual booths at the SOA and CCA meetings.

For the CAS Annual Meeting, we tried a different approach by hosting a virtual luncheon. Our program for the luncheon was entitled Empowering Our Youth With the Math Skills for Tomorrow. Executive Director, Jason Leppin and Program Managers Debbie McCormac and Karen Lindebrekke presented for the Foundation. The session provided an overview of the impact Foundation programs are making on students. Fueling the session was the combined team presentation as well as two new videos – one on virtual tutoring which our Math Motivators team recently completed and the new Actuarial Process video recently released by the Modeling the Future Challenge team. The Actuarial Process is a five-step framework, similar to the scientific method, that lays out the core structure of how to successfully identify, analyze, and manage risks.

While we missed visiting with everyone in person at our booths, we did hold drawings for both the SOA and CAS meetings. The award for both meetings was a $500 tribute gift to the Foundation made on the winner’s behalf by the Chair of our Board of Trustees, Margaret Resce Milkint. Congratulations to our drawing winners, Randy Lewis and Millie Delgado. Randy Lewis is a Math Motivators volunteer and asked us to use the funds for the Math Motivators program in Shelton, Washington. Millie Delgado is a 2019 recipient of the Elizabeth Mauro Reimbursement Program which supports those making a career change to the actuarial profession.

A very special thank-you to Margaret Resce Milkint whose incredible generosity made these tribute gifts possible.

Foundation Trustees in the Spotlight
Congratulations are in order for several Foundation Trustees who have achieved some well-deserved recognition. Trustee Sharon Robinson was named one of Business Insurance’s 2020 Women to Watch, a program which was started in 2006 to recognize women leaders doing outstanding work in risk management and commercial insurance. Foundation Board Chair, Margaret Resce Milkint, received the President’s Award at the Society of Actuaries 2020 Virtual Annual Meeting. Trustee Tonia Manning shared her views on the transformation and future growth of the actuarial profession as part of the General Opening Session Panel. We are also excited for Emeritus Trustee Roy Goldman, who was instrumental as the founder of the Modeling the Future Challenge. Roy was sworn in as the 72nd President of the Society of Actuaries.

Andrew D. Rallis, FSA, MAAA
President, Society of Actuaries

Take a Look into the Future for Those in the Actuarial Industry with Andrew Rallis

President’s Awards
Margaret Resce Milkint

ROY GOLDMAN, Ph.D., FSA, MAAA, CERA
INCOMING PRESIDENT
Roy shares his vision of the profession’s future and exponential opportunities.

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Changing Lives with Math Education

Corporate partnerships help the Foundation develop math education and financial literacy resources and fund scholarships to change lives and promote lifelong math education. Thanks to all of the organizations below whose support makes our work possible.

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- Milliman
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The Actuarial Foundation

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