



## MATHEMATICAL STAIRCASE, INC.

### Mathematical Staircase, Inc. 2020 Annual Summary Report

In 2020, the Mathematical Staircase Inc. Board met four times electronically (over Google Hangouts) and took one multi-part action and five single actions by written consent. We produced a report that determined determining that the programs, goals, and activities of Mathematical Staircase, Inc., advance its mission and make prudent use of its resources. We also adopted a substantially updated Vision Statement, revised our Continuity of Operations plan, produced a report on our progress toward diversity objectives, and did an internal audit of hours and pay for independent contractors. Mathematical Staircase, Inc. completed registration as a business in an additional state and closed operations in two other states.

The NSF continued support for MathILy-EST in March 2020 and released an additional \$57,650 for NSF DMS-1851842. A similar amount is anticipated for 2021.

Mathematical Staircase Inc. was awarded \$3,000 for MathILy financial aid and \$3,000 for MathILy-Er financial aid from the American Mathematical Society Epsilon Fund in February 2020.

We submitted one corporate funding proposal this year, after which the granting program went on hiatus.

The MathILy and MathILy-Er Directors each submitted a grant proposal to the American Mathematical Society Epsilon Fund in December 2020.

#### Mathematical Staircase, Inc. Mission Statement

Our mission is to educate mathematically talented secondary and tertiary students, particularly those who lack sufficient educational, financial, or social resources in their homes or schools to realize their potential. We believe in training program participants in mathematical thinking and writing, in mentoring program participants in their ongoing educational and career paths, and in training program instructors in discovery- and inquiry-based pedagogy.

#### Mathematical Staircase, Inc. Board of Directors

dr. sarah-marie belcastro, President and Chair of the Board

Dr. Hannah Alpert, Clerk and Secretary of the Board

Joan M. Belcastro, Treasurer

Dr. Emily Peters

Dr. Joshua Greene

Biographies of directors are posted on the Mathematical Staircase, Inc. website.

## Status of Mathematical Staircase, Inc. Projects

Currently Mathematical Staircase, Inc. has three projects:

- (1) MathILy, short for "serious Mathematics Infused with Levity," is an intensive residential summer program for mathematically gifted high-school students. Because of the global pandemic, MathILy ran successfully online with 43 students in 2020, and we do not yet know whether MathILy will meet online or in person in 2021. A 5-page report on MathILy 2020 is available on the Mathematical Staircase, Inc. website. ([link](#))
- (2) MathILy-Er, short for "MathILy, Earlier," is similar to MathILy, but is adapted for students who are slightly earlier in their chronology or mathematical development. Because of the global pandemic, MathILy-Er ran successfully online with 27 students in 2020, and we do not yet know whether MathILy-Er will meet online or in person in 2021. A 5-page report on MathILy-Er 2020 is available on the Mathematical Staircase, Inc. website. ([link](#))
- (3) MathILy-EST, short for "MathILy Early Scholarly Training," is a Research Experience for Undergraduates focused on beginning college students. Because of the global pandemic, MathILy-EST ran successfully online with 6 students in 2020, and we do not yet know whether MathILy-EST will meet online or in person in 2021. A 5-page report on MathILy-EST 2020 is available on the Mathematical Staircase, Inc. website. ([link](#))

## Financial Summary for 2020

Income:

Donations \$6548.37  
Grants–Restricted \$46,825.60  
MathILy student fees \$86,100.10  
MathILy-Er student fees \$56,024.99

Expenses:

Administrative Expenses \$1417.86  
Insurance (includes {MathILy, MathILy-Er, MathILy-EST}) \$2247  
MathILy (non-wage) Expenses \$4222.56  
MathILy-Er (non-wage) Expenses \$2274.57  
MathILy-EST (non-wage) Expenses \$4216.43  
Wage-related Expenses (staff wages, student stipends, and payroll expenses) \$135,823.15

Income – Expenses = \$195,499.06 – \$150,201.57 = \$45,297.49

*This summary report is prepared as per the Mathematical Staircase Inc. Reporting and Review Policy and posted on the Mathematical Staircase, Inc. website.*