Mathematical Staircase, Inc. 2019 Annual Summary Report

In 2019, the Mathematical Staircase Inc. Board met four times electronically (over Google Hangouts) and took two multi-part actions and five single actions by written consent. As part of preparing to receive federal funding, we updated our employee handbook, instituted formal internal controls, and added policies for handling federal funds and complying with federal regulations for NSF grant recipients. We also produced a report on our cash reserves, produced a report on compensation, and revised our payscale to reflect both structural adjustments and cost-of-living increases. Mathematical Staircase, Inc. completed registration as a business in an additional state and closed operations in two other states.

We were notified of the intent of the NSF to award funding for our third project, MathILy-EST, in January 2019, underwent New Awardee screening in February 2019, and were awarded $56,640 for NSF DMS-1851842 in March 2019. Similar amounts are anticipated for 2020 and 2021.

Mathematical Staircase Inc. was awarded $5,000 for MathILy financial aid and $4,000 for MathILy-Er financial aid from the American Mathematical Society Epsilon Fund in February 2019.

We submitted one corporate funding proposal this year, the results of which are pending.

On behalf of our first project, MathILy, we authorized a contract with Bryn Mawr College for summer 2020. The MathILy and MathILy-Er Directors each submitted a grant proposal to the American Mathematical Society Epsilon Fund in December 2019.

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. MathILy ran successfully with 38 students at Bryn Mawr College in 2019, and will run again at Bryn Mawr in 2020. A 5-page report on MathILy 2019 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. MathILy-Er ran successfully with 28 students at Bowdoin College in 2019, and we are still seeking a site for 2020. A 5-page report on MathILy-Er 2019 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. MathILy-EST ran successfully with 6 students at Bryn Mawr College in 2019, and will run again at Bryn Mawr in 2020. A 5-page report on MathILy-EST 2019 is available on the Mathematical Staircase, Inc. website. (link)

Financial Summary for 2019 UPDATE

Income:
- Donations $6425.46
- Grants–Restricted $62,104.78
- MathILy student fees $160,764.96
- MathILy-Er student fees $115,637.93

Expenses:
- Administrative Expenses $2210.62
- Insurance (includes {MathILy, MathILy-Er, MathILy-EST}) $3197
- MathILy (non-wage) Expenses $114,933.60
- MathILy-Er (non-wage) Expenses $81,499.22
- MathILy-EST (non-wage) Expenses $22,348.10
- Wage-related Expenses (staff wages, student stipends, and payroll expenses) $132,133.69

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\text{Income} - \text{Expenses} = \$344,933.13 - \$356,322.23 = -\$11,389.10
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This summary report is prepared as per the Mathematical Staircase Inc. Reporting and Review Policy and posted on the Mathematical Staircase, Inc. website.