

## Somers Science Research Foundation – Newsletter

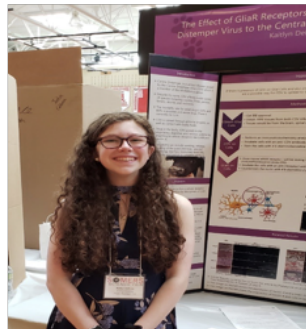
Welcome to the Somers High School Science Research Foundation newsletter. The goal of this publication is to keep members informed and to provide the opportunity to learn more about the program, the students, and their work. Each newsletter will feature student biographies, important dates or deadlines, and other news.

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### Student Research Showcase

We are proud to highlight our Science Research participants.

#### Kaitlyn DeRosa



My name is Kaitlyn DeRosa, and I am a senior in science research. I have always had a love for the sciences, with a special interest in the health of animals as I aspire to be a veterinarian when I am older. Throughout my time in the Science Research Program, I've read countless journal articles on diseases affecting canines. During my sophomore year, I devoted much of my time to educating myself on Canine Distemper and was especially intrigued by research being done to search for the cellular receptor (referred to as "Glia-R" as it is thought to be found on the astrocytes, a type of glial cell) that is responsible for its spread to the central nervous system. In the spring of that year, I competed in the Somers Science Fair and was one of the first place winners in the Animal Science category for my poster entitled *The effect of Glia-R receptors on the spread of canine distemper virus to the central nervous system of dogs*. In the fall of my junior year, I found a mentor who is a veterinarian at the Animal Medical Center of New York and shifted my focus to veterinary dermatology. I decided to concentrate on Pemphigus Foliaceus, an autoimmune skin disease, in canines and trends in the effectiveness of certain medications. Though my research isn't quite done yet, if I am able to identify any significant positive trends about a certain medication, it may be worth investigating more ways to incorporate that medication into the treatment of the disease.

### Fundraising Activities



Stay tuned for more information about a future fundraiser to outfit the classroom with a brand new rest and research sofa that will make the space an environment for creative thinking and collaborative working!

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### Gift Giving with a Purpose!

The Somers Science Research Foundation has teamed-up with Unique Design Creations to provide a win-win fundraising solution. You shop for family, friends and business associates anytime during the year, Unique Design Creations will give back 10% of the sale to the Somers Science Research Foundation.

To make a purchase and support SSRF, simply go to <https://www.uniquedesigncreations.com/> select and purchase any gift items and during check-out indicate in the drop-down that you want to support Somers Science Research. After your purchase, Unique Design Creations will automatically give 10% of your purchase to SSRF.

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### Family and Community Q & A

A new monthly feature will include a section to answer questions from families, students, and community members. Please submit your questions using the Google Form below and they will be answered in the following newsletter edition. There is a lot to learn about the program and we hope to be able to answer any questions you may have.

**Q&A Google Form:** <https://forms.gle/1bW7seLkr8aL3hPZA>

## Peyton DiSiena

As a young high school student, I knew that my passions were in the biological sciences. However, joining the science research course made me realize the specific areas I was interested in, and further supported me in finding a future career path for myself.



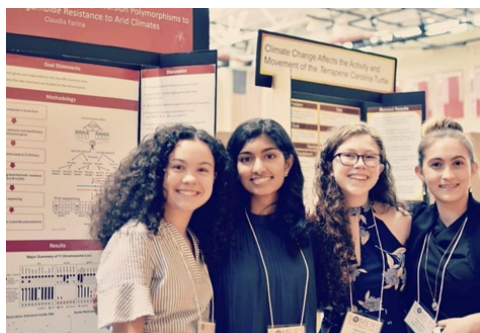
In my first year of the science research course, I worked with the canine genetics company Embark (founded by Ryan and Adam Boyko) under the supervision of Dr. Erin Chu in studying the evolution of canine genomes, particularly with the *AMY2B* gene, to see if the repeated copy number variations

found in modern species of dogs can be utilized as a biomarker for canine metabolic conditions. I won first place in the Animal Science category at the Somers Science Fair for my proposed research for this, and during the summer of 2019, I visited Embark's lab in Boston to conduct research with my mentor, finishing the project during the start of 2020.

Additionally in the summer of 2019, I was accepted to the Student Trainees in Academic Research (STAR) Program at New York Medical College. During this program, I completed research with Dr. Tetyana Kobets and other scientists in her histopathology lab, investigating the genotoxicity of particular chemicals in fetal chicken eggs.

Due to the COVID-19 pandemic, I was unable to compete in many competitions with my research. I was accepted into the selective Research Apprenticeship in Biological Sciences (RABS) Program at Cornell University for the summer of 2020, however the program was cancelled due to the ongoing pandemic. Therefore, I created a new research project for myself in which I am currently studying the potential correlation between the MMR vaccine and lowered death rates of COVID-19.

In the future, I wish to study biology and anthropology in hopes of earning my dual M.D./P.h.D. and working as a physician-scientist.



## Competition News

We are proud to announce that nearly 2/3 of Somers participants won special awards or placed in their category in the Westchester Science and Engineering Fair against almost 600 other students from our local region!

- *Jaewon Yeo won the US Agency for International Development Award*
- *Gabriella Susca won the Innovations in Biological Sciences Research Award*
- *Xander Pedersen won the Mianus River Gorge Ecology Award*
- *Nitin Seshadri won the Expanding Knowledge in Science Award*
- *Peyton DiSiena won the Carl Zeiss Research Award*
- *Anna Keane won 3<sup>rd</sup> Place in Behavioral & Social Sciences*
- *Melissa Amante won 3<sup>rd</sup> Place in Behavioral & Social Sciences*
- *Sean Reichbach won 2<sup>nd</sup> Place in Behavioral & Social Sciences*
- *Jaden Rothschild won 2<sup>nd</sup> Place in Mathematics*
- *Emily Dodd won 1<sup>st</sup> Place in Medicine & Health*

Emily was also selected as one of the Grand Prize winners to compete in the GENIUS Olympiad hosted by RIT this Spring against almost 1,000 other students from 35 States and 72 Countries.

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## Spread the word

Now is the time to remind your freshman family members and friends to contact the guidance office and add Science Research to their schedule so they can earn college credit while pursuing a topic of their interest! In addition to earning college credit, Science Research participants can add to their resume completing an original research project and presenting it at one of the many competitions that take place. Students also exit the program knowing how to engage in online bibliographic research, read and understand scientific journal articles and use the scientific method.



## Students Dates to Remember

### WESEF Practice Night

#### WESEF Practice Night

Thank you to everyone who participated on Monday March 8, 2021 and helped make WESEF practice night a great success. It was an important opportunity for students to get feedback on the projects they've been working hard on. Competition practice nights are a great opportunity for the Science Research community to come together and we appreciate your support!

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### Upcoming Competitions

[Tri County Science and Technology Fair](#) will be virtual and asynchronous this year with awards presented the last week in April.

The [GENIUS Olympiad](#) is an international competition about environmental issues hosted by the Rochester Institute of Technology that hosts projects from five general disciplines.  
April 15th- application deadline  
May 5th- finalists announced  
May 15th- participant and presentation registration  
June 12th- award ceremony

#### ***Somers Westlake Science Fair***

Saturday June 5th

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## Volunteer Opportunities

The Somers Science Research Foundation is a booster organization that relies on parents and community members to support our program by volunteering their time. We welcome volunteers who want to support our hard-working students. Please email [board@somersscienceresearch.com](mailto:board@somersscienceresearch.com) to learn more about opportunities to get involved.

Currently the board has the following open positions:  
Vice President  
Fundraising Chairperson

A background in science is not required to volunteer. The foundation board meets monthly via Zoom and is a non-profit organization that benefits from community involvement.

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### Tips for finding a mentor

As students begin their journey as student researchers, finding a mentor is an important and sometimes challenging step. Some suggestions for finding a mentor include:

- Don't be shy. Ask everyone and feel free to brag a little about yourself, your project and Somers Science Research in general. Check out what research facilities are in your area and reach out to those that fit your field of study.
- Always assume positive intent from those you reach out to, and follow-up once or twice if you don't hear back immediately.
- Be familiar with the mentor's research, and be specific about why it interests you.
- Friends and classmates may be able to suggest former mentors, so use social media platforms to connect with alumni.

## Annual Dues

Just a friendly reminder to pay your annual suggested membership donation of \$20 for the year. This can conveniently be done through <https://www.myschoolbucks.com> or via the website at <https://www.somersscienceresearch.com/store.html>. Members are recognized in the program book at the annual Science Research Symposium in May and on a donor poster at the Somers Science Fair in June, as well as on the 'Donations' page of the website. Contributions to the SSRF are tax-deductible.

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### Car Window Stickers are still available.

Please email [WMAelia@somersschools.org](mailto:WMAelia@somersschools.org) to get a sticker at no charge.

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### Somers Science Research Store

Support the program by showing off your Science Research gear! Please take a look at the items available for sale at <https://www.somersscienceresearch.com/store.html>.



### Support Science Research

The Somers Science Research Program relies on the generous support of our donors in the community. In addition to fundraising efforts by the foundation committee, your contribution will help to support the program by funding events, equipment and travel. Contributions to the SSRF are tax-deductible.

<https://www.somersscienceresearch.com/donations.html>

### Donors:

#### *Platinum (\$1000+)*

The Latifi Family, Anonymous

#### *Silver (\$100 - \$499)*

Emanuel Acosta, Bridgham Barr Orthodontics, Tracy Dodd, the D'Souza Family, the Friscia Family, the Gonzalez Hauger Family, Yeeling Lee, the Murphy Family, Mads Pederson, Andrea Reichbach, the Taylor Family

#### *Bronze (<\$100)*

Candace Bassi, the Bensabeur Family, the Bilbao-Mahoney Family, the Blanch Family, Mr. Caron, Frances Cicogna, the DeMarinis Family, the DeMeo Family, James Dodd, the Dunn Family, the Gillis Family, the Ginty Family, the Googel Family, Kathryn Graham, the Heese Family, Helga Lanza, the Mills Family, the Onishi Family, Denise Potter, the Rao Family, Candice Rivas, the Seeger Family, the Seshadri Family, the Siemers Family, Lauren Smith-Arena, Vito Susca, Rozmarin SzaboBruncaj, the Townsend Family, the Wilke-Olsen Family, Hangu Yeo, Eun-Jeong Yi

## Fundraising Activities

### Amazon Smiles

The Somers Science Research Foundation Incorporated now has an Amazon Smile account so that your everyday shopping can benefit our students. If you specify SSRF as your charity and make [smile.amazon.com](https://www.amazon.com/smile) your default amazon link (in place of [amazon.com](https://www.amazon.com)), 0.5% of every purchase you make on Amazon will be donated to the Foundation to benefit our students and their research. Once it's set up you don't need to do anything else!

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**Click below to sign up and start donating:**



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### Somers Science Research

Detailed information about the program is available on our website at <https://www.somersscienceresearch.com/home.html>. Some of the information you will find there includes the course overview, timeline, and areas of research. Additionally, you can learn about the foundation, the competitions and access pictures/videos from previous years.