

Teacher Grant Application Deadline: March 6, 2023

INSTRUCTIONS:

- 1. Complete this document, answering all questions on pages 2 4. If you would like to be considered for the Charlie Baker Legacy Award, please complete the final page. If not, please just leave blank.
- 2. Once complete, save this document in .pdf or .doc format and include your name in the file name. For example: Joanna Smith Teacher Grant.pdf
- 3. Follow this link to submit an online application and attach this document. If the link doesn't work, cut and paste this URL into your browser: https://airtable.com/shr6aIdVteO25uf6T
- 4. You will need to fill out a short online form, duplicating some of the applicant contact information. At the bottom of the form, you will find a link to upload your completed application.
- 5. Once your grant is submitted, you will receive an email confirmation to acknowledge receipt of the application and that everything uploaded properly. This may take 1 business day.
- 6. The Teacher Grant Committee will review the grants in Late March and Early April. The announcement of successful applications will be made by email in April, 2023.

If you have any questions, or need assistance in uploading your application, please call 617-232-3846 or email Jennie@brooklineeducation.org or Elizabeth_Ascoli@brooklineeducation.org.

Thank you for applying for a BEF Teacher Grant!

Additional Awards for Teacher Grants:

The <u>Charlie Baker Legacy Award</u> (\$1,000) is given to an exceptional Teacher Grant application in the areas of U.S. History or World Geography.

The <u>David E. Pradell Award</u> (\$500) is given to a middle school Teacher Grant recipient whose work will stimulate students' development of self-assurance, collaboration, and sense of social responsibility.

The <u>Adam Russell Gelfand Fellowship</u> (\$500) is given to a Teacher Grant recipient whose project is recognized by the committee for its excellence.



Teacher Grant Application for 2023-2024 Academic Year APPLICATION DEADLINE: *Monday, March 6, 2023 at 5:00 pm*Cover Page

APPLICATION MUST BE TYPED

Project Title		
	Costa Rica: Bringing Hope to the Climate Crisis	
Name of Applicant(s)	Melissa London / Mark Goldner	
School and Grades/Subjects You Teach	6 th Grade Science (Pierce) / 7th & 8th Grade Science (Heath)	
Telephone Number(s)	978-407-5450 (Melissa) / 617-877-4520 (Mark)	
Email Address(es)	mblondon100@hotmail.com / mark_goldner@psbma.org	
Years Teaching in PSB, Total Years Teaching	Brookline since 2005, Teaching since 1993 (Melissa) / Brookline since 2002, Teaching since 1992 (Mark)	
Amount Requested	\$5200	
Are you applying for the Charlie Baker Legacy Award?	No	

Please list previous BEF grants (year, title, Melissa: teacher/collaborative) 2013 Teacher Grant / Adam Russell Gelfand Fellowship: Tanzania a Case for Climate Change (Teacher Grant) 2012-2013 "Developing A Classroom Culture of Thinking in Middle School Math and Science (Collaborative Grant) 2012-2013 "Connecting Literacy and Inquiry Science" (Collaborative Grant) 2008-1010 Years One & Two: "Quality Community Service Learning Programming, Grades 3-8" * (Collaborative Grant - I was the lead) 2008-10 "Years One & Two: Earth Science By Design" (Collaborative Grant) 2008-2009 Year Two: "Pipeline to Success: The Pierce Mentoring Project" (Collaborative Grant) 2007-2008 "Building Science Background Knowledge and Professional Development Capacity" (Collaborative Grant) 2007-2008 Year Two: "After School Matters" (Collaborative Grant) 2006-2007 Year One: "Historical Writing Guidelines Program" (Collaborative Grant - I had been teaching Social Studies) Mark: 2021 "Climate Science in the High Arctic" (Teacher Grant) 2017 "Raspberry Shakes" (IdeaLab Grant) 2015 "The Pulse!" (IdeaLab Grant) 2014 "Canadian Wildlife Federation Learning Institute in Nunavut, Canada" (Teacher Grant) 2012-2013 "Connecting Literacy and Inquiry Science" (Collaborative Grant) 2010 "Boston Rocks!" (Collaborative Grant) 2008-10 "Years One & Two: Earth Science By Design"

(Collaborative Grant)



Teacher Grant Application for 2023-2024 Academic Year **Project Description Section**

1. **Project Summary** (1-3 sentences)

We (Melissa London and Mark Goldner) will travel to Costa Rica to spend time at La Marta nature preserve and collaborate with Science professors and students from Northern Arizona University to explore the impacts of climate change on the flora and fauna in the reserve. Additionally, we will spend time in Limón, the poorest region of Costa Rica, learning how climate change is impacting the cultivation of cacao and the intersection of climate change, social justice and sustainability. We will work to bring our field experiences into the classroom.

2. Goal Statement

What are your explicit goals for the project? What would be the best outcome for the work you propose?

Our primary goals include:

- Exploring and documenting specific examples of climate change and also how a society like Costa Rica is working to protect its resources from the worst effects of climate change and serve as a global leader in tackling this existential crisis.
- Developing lessons and professional development modules connected to our experiences to bring back to our own classrooms and to disseminate with others teachers in Brookline and beyond.
- Engaging and inspiring students through real-world case studies and teachers' first-hand experience in the field.
- Making the study of climate change less abstract, more manageable and solution-oriented for students.
- Strengthening connections with scientists and educators and create new connections.
- Reinvigorating our teaching and renewing our joy of learning through collaboration and refreshed curricular options offering real-world genuine opportunities to learn and do science and service.

3 Context

What experiences (inside or outside the classroom) have led you to apply for this grant?

Pamela Villalobos, whose family owns and administers La Marta, a nature preserve in Central Costa Rica, has invited us to collaborate with Northern Arizona University scientists this coming August. These scientists have been engaged in various research projects at La Marta, and the plan is for us to accompany them on site during field work with their students. We will assist them in data collection and also take time to research some of our own scientific questions. The goal is to share what we learn during this authentic field work with our students next fall.

Additionally, we have been in contact with George Grant Ebanks who is founder and general director of G&E Chocolate Adventure Company which is focused on sustainable cacao production and supporting small farmers in Limón, one of the poorest cities in Costa Rica. He is excited at the thought that G&E Chocolate can be a case study for Brookline students to learn about the intersection of climate change, social justice and sustainability.

Melissa knows Pamela and George because she lived and worked in Costa Rica from 1993-1996.

We have a track record of strong collaboration and have worked together many times in the last nearly twenty years designing and leading professional development within the district and outside Brookline. We are eager to work together on this exciting new venture. Collaboration will be essential throughout.

Before the trip even begins we will need to solidify all of the logistical details of our itinerary. We need to work with the scientists from Northern Arizona University to understand exactly what the research will entail and how we can participate most effectively in their field work at La Marta. And we need to educate ourselves about what has been happening in Limón province, the poorest region of Costa Rica, which is also home to G&E Chocolate and its cacao farmers.

Since one of the main goals of this project is to develop educational lessons and activities related to our experience in Costa Rica, while we are in the country we will be thinking about how this might look. We envision many opportunities for animated brainstorming and aspirational conversations during our time there, as that is often what happens when we are working together. After the trip ends we will need to more formally consolidate our learning into something we can share with colleagues and with students. We aim to meet together upon our return and before the start of the school year to begin this process.

Beyond sharing our experiences and curriculum with others in the middle school science department, we will look at ways we can devise new professional development opportunities for our Brookline colleagues at a variety of grade levels to offer in the summer of 2024.

The two of us have a lot in common in addition to both teaching middle school science. Both of us are passionate about motivating our students to want to learn and do science. We both believe that literacy and science go hand in hand. In fact, we collaborated on the book *The Stories of Science: Integrating Reading, Writing, Speaking, and Listening into Science Instruction, 6–12* with Janet MacNeil, former K-8 Science Coordinator for Brookline. Something else that we have in common: we both enjoy combining our passion for travel with doing authentic science research and investigation.

Thanks to the BEF, the two of us have been fortunate to be able to travel and explore our interests connected to science, education and social justice. Melissa was the lead on a two-year collaborative service learning grant in 2008 and was later awarded the Adam Russell Gelfand Fellowship for her trip to Tanzania in the summer of 2013. Mark also had a chance to travel to the Arctic several times thanks to the BEF (in 2013 when he worked with the Inuit in Nunavut, Canada and doing glacier research in Svalbard, Norway in 2021 with PolarTREC). Each of us has independently explored the science of climate change and its impact on vulnerable human populations. (These experiences represent just a fraction of the different science and social justice experiences the two of us have undertaken over our careers here in Brookline!)

Now, with this collaborative grant, we have an exciting opportunity to work together in a new context on a fresh new project related to climate change. This time our focus will be on how we can provide middle school students with a hopeful perspective and opportunity to take action to positively address what can otherwise be an abstract, overwhelming and oftentimes scary issue.

4. Project Description

Describe the structure of this grant. What is your time frame? When and where will you be working? With whom will you work? You may include copies of supporting material (e.g., conference brochure, tour itinerary). Links to websites may be used for supporting materials and are preferred, if available.

We anticipate that we will travel to Costa Rica for two weeks. Our proposed itinerary is (subject to change as we continue to work with our in-country community partners):

- Day 1: Arrive in San José. orientation with <u>Northern Arizona State</u> scientists and community partners. Logistical preparations.
- Days 2-6: Travel to <u>La Marta reserve</u> where we will work alongside the team from Northern Arizona University exploring the preserve and collecting data for their primary investigation and our own investigations.
- Days 7-10: Head to Limón to <u>G&E Chocolate</u> farm on the Atlantic Coast to meet with George Grant Ebank and farmers in the cooperative.
- Days 11-13: Explore additional locations to visit. Liaise with K-12 schools in San José that we may partner with in the future (i.e. <u>Blue Valley School</u>, where Melissa used to work)
- Day 14: Return home

5. Impact

a. Describe as specifically as possible the impact of the work you propose:

• On Us -

We expect that this experience will invigorate our teaching in several ways. We are excited about sharing a new travel and science experience with our students and colleagues, and we think it will open up new possibilities for future collaborations with scientists and community activists - both globally and locally.

• On Our Colleagues -

We will share what we learn with our colleagues in the middle school science department and develop possible professional development to offer other teachers in the district at the elementary and middle school levels.

• On Our Students -

We have both experienced firsthand the powerful impact that teacher travel and research experience has on students. When we can share our stories of being out in the world, out in the field, students see and trust that we have firsthand knowledge and confidence in what we are teaching. They are more readily engaged in the science topics we are inviting them to explore, much more so than if we just taught the same information from a textbook, website or video. We will even invite students to follow along our journey while we are in the field (through blogging and/or social media).

b. How will you evaluate the success of this project?

Upon our return we will spend several additional days during the summer working to develop initial lesson plans. Because we will translate our experiences abroad into concrete educational lessons and activities to use in our classrooms and with our colleagues, we will consider this project successful when we have developed and implemented those lessons and have had the opportunity to share them with others. Success will also be evident in a vibrant photo/video journal (shared via a blogging platform and/or social media).

Additionally, we will consider it a success if we are able to identify potential local community partners connected to climate change, environmental and social justice who are interested in working with our students to address local issues.

6. Dissemination

How will you share your learning with others in your school and district community? For example, will you share it departmental or school meetings, in an online format, or design other forms of dissemination of your project?

During the trip we plan to use social media and/or blogging to communicate and connect with our students and others in our community. Once we return, we will take additional time in the summer to create lessons for use with our students and to share with our colleagues.

In the fall we will share what we learned with our colleagues at the middle school level during our department meetings. We plan to meet periodically (at least monthly) to continue developing and refining those plans and reflecting on their effectiveness.

We aim to develop fresh new professional development opportunities for other teachers in the district at the elementary level; perhaps we will offer these PD opportunities in the summer 2024.

We anticipate submitting a proposal to present our work at the 2024 National Science Teachers' Association Annual Conference in Kansas City.



Teacher Grant Application for 2023-2024 Academic Year **Budget and Finances Section**

Expense	Purpose	Cost
Consultant	N/A	
Materials and Supplies	N/A	
Travel and Accommodations* please include applicable taxes.	 Airfare Car Rental Accommodations (We anticipate only needing to spend up to 4 nights in hotels, as most other nights we will be staying at either the Reserve for \$10 per night or with friends for free) Food 	\$1800 (round trip flight anticipated to be cost roughly \$900 roundtrip for each of us in August with taxes and fees) \$1800 (two week rental of a 4x4 vehicle plus gas and insurance) \$900 (total estimate based on scan of 3-star hotels nightly single room rates in downtown San José, near the airport and in Limon province) \$700 (budgeting \$25 a day for each of us for breakfast, lunch and dinner + bottled water and snacks)
Conference Fee	N/A	
Other	N/A	
Substitutes**(please indicate days/hours needed)	N/A	
TOTAL		\$5200

Please be as specific as possible.

Finances

- a. Will there be additional funding from other sources? Please describe. No.
- b. Are resources needed to continue the work of the project after BEF funding ends? If yes, please describe how these resources will be obtained. If no, please describe how the work of the project will be funded or continued after completion of funding by the BEF.

No. There are no additional costs needed to complete our work once the travel is completed.
c. Do you foresee any potential challenges /obstacles and, if so, what is your strategy for dealing with them should they occur? No.
d. Will you be able to complete the project if only partial funding is available? _X_YesNo If only partial funding is available, would you be able to redesign the project? _X_YesNo
Please explain:
While we are prepared to modify the length of the trip, neither one of us is prepared to travel without the other
e. For groups of three or more educators applying together: If the BEF can fund only a subset of your group, is there a reason this would pose a problem for you?X_YesNo
Please explain: We are not prepared to undertake this project unless both of us can go.



Teacher Grant Application for 2022-2023 Academic Year Charlie Baker Legacy Award Section

If you are applying for the Charlie Baker Legacy Award (fully described in the Call for Proposals), please indicate how the additional \$1,000 funding would extend and/or enrich your project.

Please limit your response to one page.