

Annual Report 2015

Message From Our President

As we start our third year i-Trek is becoming increasingly more impactful and developed! This year brought surprises and accomplishments that we could not have imagined. Every year I think we know exactly what to expect, however we always find a way to grow and learn more than we thought possible. Here are just a few examples:

- We restructured our Trek program to address some of the areas of improvement witnessed during our pilot. This involved launching a weeklong orientation in Boston. The orientation was a huge success and we look forward to making it bigger and better in future years.
- This year we saw a decline in recruitment efforts, but this was not a problem. We received four times the number of applicants for the 2015-2016 Trek. We now know that interest is not going to be our limiting factor.
- We started forming relationships with possible graduate schools with which we can establish “feeder” arrangements. This resulted with a partnership with MIT Office of Graduate Education.
- We joined the NSF I-Corps program at MIT. We hope to use what we learn in the program to secure continued NSF funding in the future.
- We had fun engaging and learning with younger students by testing out STEM workshops on elementary age children.



As you can see, we have been busy. We are extremely grateful for your support and hope you will continue to support i-Trek in the future.

Thanks for your support,

A handwritten signature in black ink that reads "Niaja Farve". The signature is written in a cursive, flowing style.

Niaja Farve

Mission

In order to address the lack of diversity among STEM (science, technology, engineering and math) degree recipients, i-Trek (I Turn Research into Empowerment and Knowledge) has developed a platform that aims to provide underserved and underrepresented students with the skills and resources necessary to succeed in STEM undergraduate and graduate degree programs. The underrepresented and underserved communities include students of lower income, women, and minorities who often face obstacles in obtaining equal support or access to the resources required for success in STEM. It is through community outreach and the Trek Mentorship Program that i-Trek aims to encourage a high level of interest in STEM and create a pipeline for increased participation in those areas of study.



2014 Trekker Collecting Samples

Accomplishments

2015 Trek Orientation

From August 2nd – 8th, 2015, i-Trek brought 15 students, from a variety of schools and backgrounds, to MIT for a week-long STEM experience. The students networked with MIT graduates, students and alumni; toured MIT, Harvard and UMass Amherst; and learned about water and energy related research from graduate student research presentations and visits to the New England Aquarium and Deer Island. At the end of the program, the students worked together to brainstorm a research project that they will complete during their full Trek experience planned for the summer of 2016.



2015-2016 Trekkers visiting MIT

During the first full day (Monday, August 3rd), students spent most of their time touring prominent schools in the Boston area. They received a

campus tour of MIT as well as lab tours in the MIT Media Lab, Drennan Lab and Precision Motion Control Lab. This was followed by a campus tour of Harvard. Later that evening, students spent time with MIT students and alumni playing board games and networking.

Tuesday, students traveled to UMass Amherst to tour their campus. After the tour, they left directly for a scavenger hunt around Boston. Students enjoyed having the time to explore the city on their own and find historical landmarks.

The following day, students attended research presentations by three graduate students. Topics included Biofilm structures, neuroimaging, and renewable energy policy. These presentations followed by a STEM scavenger hunt. Students had to solve STEM problems and find the solutions around the MIT campus.

Thursday featured additional research talks from graduate students on desalination challenges, turning research ideas into a viable business, navigating challenges, and STEM identity. The students also visited the MIT MSRP poster session to learn about current undergraduate research projects. This full day concluded with an evening at the aquarium learning about ecological water issues.



Trekkingers at Dear Island in Boston, MA

On the final day, students began at Deer Island learning about wastewater issues. They were able to tour the facility and speak to some of the facility's leadership team. The remainder of the day was devoted to brainstorming exercises for individual research projects and then "pitching" those research ideas to a panel of mock research funders in a "shark

tank" exercise. This helped the students practice their negotiation skills and respond in real-time to challenging questions.

Overall, the students learned invaluable skills, made a variety of networking contacts, gained a better understanding of what STEM research is, and learned how they can contribute to current STEM issues with their own research. Thanks to support from the MIT Office of the Dean of Graduate Education, MIT Community Service Fund, NSF I-Corps and donations from several individuals, we were able to provide a very rewarding Trek Orientation experience to our students and lay the groundwork for successful completion of their full Trek experience in 2016.



View the video highlighting the Orientation [here](#).

Workshop Development

In 2015, we began the process of turning the kits into a well-developed workshop for K-12 participants. The first session was held in Montgomery County, MD for 20 kids and kids they were literally bouncing off the walls!

Members of the i-Trek team presented a chemistry workshop. Each workshop has both an instruction and a hands on component. The chemistry workshop began by playing a game where the children became protons or electrons, in order to demonstrate the atoms that make up a molecule of water. The "electrons" ran around the "protons" to demonstrate how an atom works.

After this, kids sat at tables and got messy! Each child received a cup, in which they mixed water, borax, cornstarch, food dye and glue. After stirring the mixture and rolling it into a ball, the kids were thrilled with the result -- bouncing balls. Kids then bounced their balls all around the room, while volunteers helped to measure how high their balls bounced.

Each child leaves a workshop with something they have made and a better understanding of a basic principle for a specific STEM field. We look forward to offering more of these workshops in 2016.

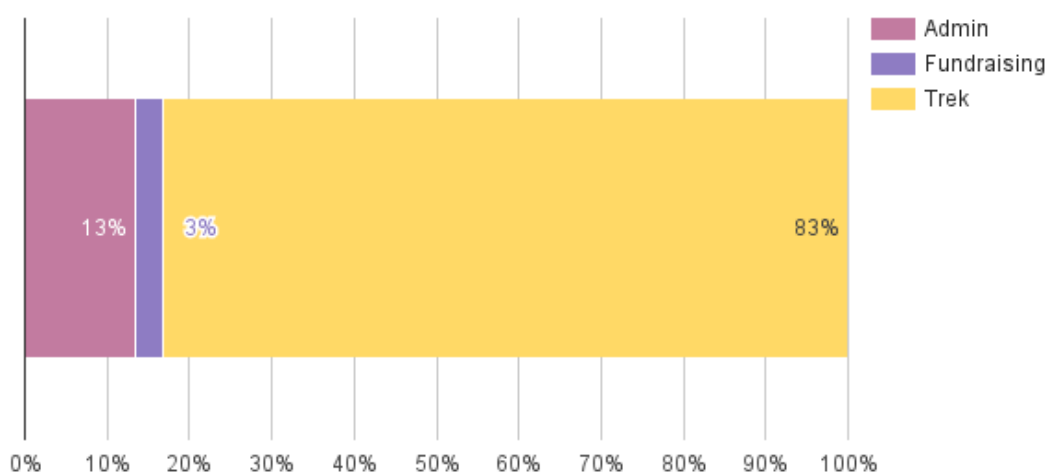


Students at the i-Trek Chemistry Workshop

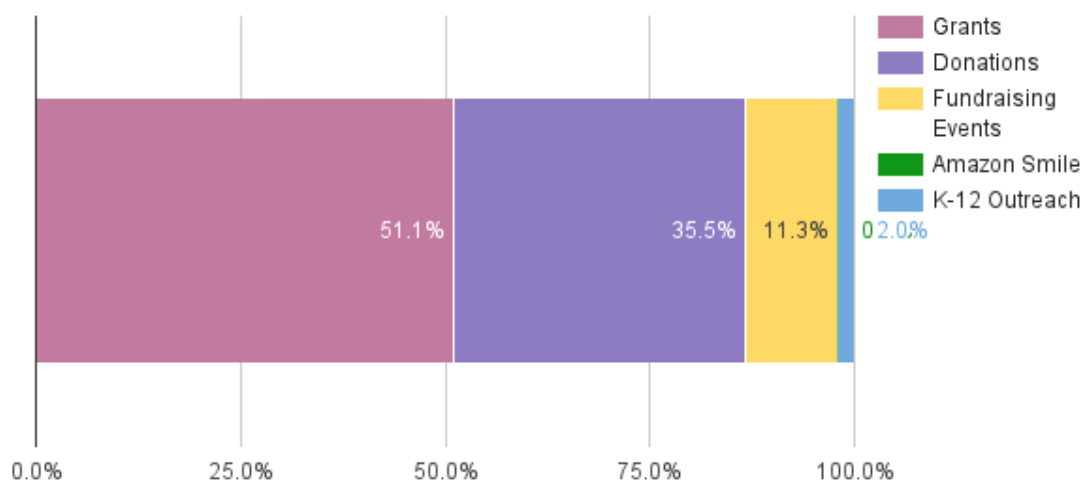
Balance Sheet

| 2015 Balance Sheet Summary | |
|----------------------------|--------------|
| Assets | \$ 15,651.30 |
| Liabilities | \$ 14,312.42 |
| Total Net Assets | \$1,338.88 |

2015 Expenses By Category



2015 Assets By Category



Strategy Information

In 2015, we became even more creative in our fundraising efforts. We plan to continue the successful programs into 2016, such as the fund a student campaign. We also began relationships with institutions with desirable graduate opportunities, starting with MIT. In 2016 we intend to strengthen these relationships and look toward to forming new ones. Finally, we plan to explore new fundraising techniques such as crowd funding as a yearly effort to raise funds.

We continue to be proud of our spending habits as we keep the students our main focus and expenditure. We have no plans for this to change, as i-Trek remains a fully volunteer-run organization.

Your Donation is More Important Than Ever

i-Trek depends on donations to support the mission. Although our overhead is low because we are run by volunteers, we need funds to operate. **To make a donation please visit**

<http://www.i-trek.org/sponsors/donate/>

Volunteer and Make a Difference



2014 African American Festival

We would be nothing without our volunteers. Everyone on the i-Trek team donates his or her time so that all of our funding can go directly towards our mission. Volunteers are divided into four committees:

- Management
- Treks
- Fundraising
- Public Relations



i-Trek Volunteers at the 2014 Benefit Dinner

Looking Forward

We have big goals for 2016 including:

- **Finance:** We expect to increase funding by 50% through increasing funds from grants and building long-term relationships.
- **Treks:** In 2016 we plan to host our next Trek and induct a new cohort with an orientation.
- **Notable Upcoming Events:** In 2016 we plan to implement several fundraising and outreach events including our first crowd funding campaign.

