American Chemical Society

Student Chapters Submission Reporting

Chapter: Stern College for Women-Yeshiva University Student Chapter

Academic Year: 2018-2019

Report status: Pending

Chapter Information

Members

The *Total Chapter Members* count, the *ACS Student Members during Academic Year* count, and the *Non-ACS Members* count will be available in the PDF once the Student Chapter report is submitted. Please view your dashboard for these values.

Department/Institution/Information

The *Undergraduates Majoring in Chemistry* count and the *Chemistry Faculty* count will be available in the PDF once the Student Chapter report is submitted. Please view your dashboard for these values.

Chapter Officers

Chapter Co-President	Neda Shokrian
Chapter President	Tzivia Linfield

Faculty Advisors

Chapter Faculty Co-Advisor	Chaya Rapp
Chapter Faculty Advisor	Donald Estes

Self-Assessment

*Name 1-2 major goal(s) that your chapter focused on. What approaches did you take to achieve them, and what challenges did you face?**

Our greatest goal this year was to focus on the theme of green chemistry. Since last year, we planned our entire proposal around this idea, and we tried as much as possible to have every event focus, in some way, on green chemistry. In particular, we wanted our community outreach programs to focus entirely on green chemistry. The opportunity we have with the young children in elementary school is rare, and we strongly believe that our encouragement to focus on saving the environment can have a lasting impact on the children. We made sure that, by the time each student left the classroom, we had imprinted in their minds the idea that using environmentally friendly alternatives to chemical toxins can be just as effective, and very fun. For example, we explained that the chemicals found in regular cleaning wipes end up in landfills, which can damage our environment. However, bleach-free wipes, which are less toxic to the environment, work just as well to clean the dirt from the bottom of our shoes. Small experiments such as this one emphasize green chemistry ideas that students can use at home. We also showed them that toxic, unsustainable fuels, such as those found in rocket ships, can pollute our environment. However, something as small as an alka seltzer tablet, which contains carbonic acid, can make an easter egg POP with the addition of mere water! The last experiment we wanted to demonstrate, using lemons to construct a circuit and make a battery, was challenging because we had to explain to the students the concept of electrons, acids/bases, and current. However, we taught the students the idea that all particles contain electrons, and just like in a battery, electrons flow to the more positive side. In doing so, they move their charge with them, and this flow of charge can turn on a small LED light. We even encouraged the students to all join up together, and combine about 20 lemons into one continuous circuit to light up a couple of LEDs together. In our holiday-themed chemistry jeopardy event, we also included a category on green chemistry, encouraging students to think of innovative ways to take every day regular chemistry experiments, and make them more environmentally friendly. At the New York Hall of Science's National Chemistry Week Event, we did the alka seltzer experiment with over 100 kids. For each child that did the experiment, we encouraged them to think of other technologies that require a lot of power or force, such as a car or even a lawn mower, and how we could use this kind of simple and safe explosion to generate the same amount of energy.??

*Based on your chapter's successes and failures, what are your goals for next year and what did you do differently?**

One of our greatest successes was expanding our community outreach, which we were really happy about. In past years, our main community outreach activity was our public school event at??P.S. 134 Henrietta Szold. However, this year we also attended the New York Hall of Science's National Chemistry Week event of the New York Section of the American Chemical Society and were able to do a green chemistry demonstration for over 100 kids! We also spoke with the public school coordinator at P.S. 134 Henrietta Szold, and she expressed how happy she was when we came for the day to teach our science experiments, and how great it would be if we came more often. Thus, we would like to continue to expand our outreach efforts by returning to the New York Hall of Science's National Chemistry Week event, and by going to the public school at least twice during the year. We also pushed ourselves to host more events this year that would cater to larger and more diverse group of students by letting each event focus on a different aspect of chemistry. Thus, one event focused on PhD programs and research by our organic chemistry professor. Another event was tailored towards student with less background in chemistry that could participate in a holiday-themed chemistry jeopardy. In doing so, we were able to join students with biochemistry under their belts with students that had not yet finished their first semester of general chemistry. We were able to reach a much larger student base this year, and this is something we also hope to continue in the future.One of the areas where we wish we could have improved is in sending more students to the annual ACS conference. Our university sponsors two students each year to attend the conference, but many students from our board, as well as other students in the university, have completed amazing and interesting projects, and we think it is a shame that more students cannot present their research at the conference. There are other groups on campus where students are welcome to present their research to their peers and professors, so perhaps a goal for next year would be to join up with those groups to promote and encourage students to present their findings, whether it be from summer projects or year long research. There are also very few students at our university that pursue a degree in chemistry or biochemistry, so perhaps another goal would be to host a "career fair", featuring different professions available to students with a degree in chemistry or different graduate schools seeking students with such a degree.??

*Describe a specific event or tradition that you think is unique to your chapter?**

One tradition,??other than picking a theme on which most of our events are based on,??that is unique to our chapter is our annual magic show, which is hosted by the Chemistry Club and open to any and all undergraduate students and professors. This is usually one of our most popular events of the year, gathering many students with interest in chemistry or organic chemistry. The entire b-oard sends out emails to the entire student body, and the co-presidents design a flier that lists the information for the magic show, as well as the tricks that will be performed. We also hang up the fliers all over the school, and ask each of the chemistry professors to send out emails to their classes about the upcoming event. The event always takes place in the organic chemistry lab, and the materials are provided for by the school. Each of our board members researches, designs, and performs a chemistry experiment that appears to be a magic trick, but of course has a chemical explanation to it. We also often invite students to volunteer to perform the trick, making it interactive and entertaining for everyone. For example, one of the tricks is heating up KClO3 in a test tube, an oxidizing agent, until it is liquid. Then, in the hood, we drop a gummy bear into the test tube and quickly close the hood and stand back. Immediately, the test tube glows and, like magic, fireworks appear to be shooting out of the test tube! The board member then explains that the glucose in the gummy bear is oxidized, thus leading to an "explosion". Another favorite trick is pouring fatty milk into a bowl, and then adding drops of aqueous food coloring. The two mix in a cool pattern upon the addition of soap, a detergent that encourages the formation of micelles. Another favorite trick that involves our student volunteers is a competition to blow up a glove with air in the smallest amount of time. Baking soda is placed into a latex glove, and the student must cover a vinegar filled beaker with the glove. After a little bit of the powder from the glove falls into the vinegar, the glove slowly starts to expand, filling with air and nearly popping off. The board member explained how the reaction with baking soda and vinegar releases carbon di-oxide gas, which fills the glove with air and makes it expand. Perhaps the most fun experiment is what is famously known as "el-ephant toothpaste". We combine dish soap, hydrogen peroxide, food coloring, and KI (catalyst) into a large tube together, and out shoots a ton of foam! This experiment is really cool, and the board member explained that the hydrogen peroxide is rapidly deco-mposed into oxygen and hydrogen gas, thus leading to a mountain a foam that quickly shoots out of the tube. A ton of steam also exits the tube, thus demonstrating that the experiment is exothermic.??

Service

*In what ways do you think your chapter had an impact on each of the following communities through service and outreach: your chapter/department, your university, and your local community?**

Our student chapter focused on outreach this year, with an emphasis on Green Chemistry.?? We submitted a proposal and rece-ived funding from the ACS through the Community Interaction Grant (CIG).?? As a result, we had the ability to reach out to students in our university, students in a local elementary school, and the greater NYC coomunity. One highlight from reaching out to our i-mmediate community, our university, was through a magic show performed by our own student chapter members. In order to reach out to elementary aged students in our community, we taught a lesson on Green Chemistry (in honor of Earth day), to students at the Henrietta Szold school, a local elementary school in New York City. Furthermore, we used extra funding from the year from the CIG unused funds to purchase supplies for the teachers of the school to make solar panel cars. This allowed for the students to extend their green chemistry knowledge and gain more exposure to STEM. In order to reach out to the greater community and c-onnect with individuals of all ages and backgrounds, we participated in the New York local chapter's event at the New York Hall of Science, where we made "Easter egg rockets" with the participants. Through each of these events, our student chapter was able to stress the importance in an early interest in chemistry, the importance in women in the field, and the importance in carrying out l-aboratory experiments in an environmentally friendly way.??

*How did you incorporate NCW, Mole Day and/or CCEW into your service activities?**

Our chapter celebrated National Chemistry Week (NCW) with New York's local chapter this year at the New York Hall of Science. Our chapter had four student members, as well as two faculty members, in attendance. We has an interactive table where partic-ipants were able to build their very own "Easter egg rockets." For Earth day (CCEW), our chapter combined our theme and our outreach event at PS 134 to teach elementary aged children the importance of keeping our Earth clean. We stressed that we, as humans, gain a tremendous amount from the Earth. As a result, it is our job to keep the Earth clean.??

Service Events

Chemistry is Out of This World!

Date: 2018-10-21
Location: New York Hall of Science
Type: Outreach/Service to Community
Category: Service
Audience(s): General Community
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 300
Number of ACS Student/Chapter Members: 4
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: The chemistry club participated in an outreach event at the N.Y. Hall of Science to celebrate National Chemistry Week. In line with this years theme of Chemistry is out of this World," the clubs activity involved making colored egg rockets. We made the seltzer rockets byreleasing pressurized carbon dioxide dissolved in liquid. This allowed us to shed some light unto NASAs new i-deas for rocket fuel production on Mars. This experiment was conducted by filling half of an Easter egg with water and Alka s-eltzer tablets. We quickly closed the egg and waited for the egg to pop open! We will explained that the buildup of the released ca-rbon dioxide from the Alka seltzer tablet forced the egg to pop open so that the pressure can be released.

Henrietta Szold PS 134 Outreach

Date: 2019-04-12
Location: 293 East Broadway, New York, NY 10002
Type: Outreach/Service to Community
Category: Service
Audience(s): Local Elementary School
NCW/Mole Day/CCED: CCEW
Number of People Served (Audience): 250
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Outreach program held for students at PS 134 to teach them the importance in green chemistry, with a focus on Earth day. Three demonstrations/hands-on activities were done with the students to stress the importance in making choices that benefit our environment, both in the laboratory and at home. The first demonstration showed the students that "green" cleaning wipes, which do not contain bleach or other harmful chemicals, are just as effective as the wipes which do contain bleach. The students then did two experiments on their own: Easter egg ro-ckets and lemon batteries. The Easter egg rockets consisted of students using an alternative fuel source (alka-seltzer and water) to make their rockets "take-off." The lemon battery experiment gave students the chance to build a circuit and light up a LED light using an alternative energy source, lemons!

Magic Show

Date: 2019-04-08
Location: Stern College for Women
Type: Outreach/Service to University
Category: Service
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 60
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 5
Number of Faculty: 4

Description: Magic Show held for chemistry students by our board members. "Magic tricks" included elephant's toothpaste, molten gummy bear, magic milk, flame tests, and polymer making. During this event, we highlighted the importance in carrying out laboratory experiments in as safe a way as possible for both o-urselves and the environment.

Resources for PS 134

Date: 2019-04-30
Location: PS 134
Type: Outreach/Service to Community
Category: Service
Audience(s): Local Elementary School
NCW/Mole Day/CCED: CCEW
Number of People Served (Audience): 200
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: Supplies were purchased for the science depart-ment in PS 134 for continued education on Earth day and green chemistry. PS 134 is the school we go to each year to do outreach with and we felt our remaining funds should be used for their t-eachers to be able to continue our lessons in green chemistry with their students. PS 134 is a Tier 1 school. As a result, they have little funding for extra-curricular activities like science. Purchasing these materials helps to maintain our university's relationship with PS 134 as well as give the students more exposure to STEM p-rojects. The teachers at PS 134 requested solar panel car kits. These kits give students the chance to invent and build, using concepts that they learned with us and with their teachers.

Professional Development

*What areas of professional development do you think your chapter needs to address most and which events did you hold that significantly contributed to your chapter's improvement in those areas? (You feel)**

Our chapter is working hard to recruit more students in our university to pursue a degree, and ultimately a career, in chemistry. Our university has many students pursuing degrees in biology, so many students are already interested in the sciences. We believe that one of the biggest reasons that students are leaning more towards biology as opposed to chemistry is due to the lack of exposure in chemistry. As a result, we started off the year with one of our own chemistry faculty members presenting his research. Dr. Ran Drori, a professor on campus and familiar face to the students, spoke about his research involving anti-freeze proteins. It was an interactive evening where students had the chance to see what a career in research has the potential to look like. We also had an event in the Spring semester where two students presented reearch that they had worked on in Summer 2018. This provided st-udents with the chance to relate with the presenters, as they were their own peers. It was less daunting for students and it helped them realize that the field is accessible to them as well. We also continued our school's tradition of allowing select students to at-tend the ACS Spring National Meeting. This experience truly allowed our students to envision their future. Being in a large confe-rence center with chemists in every field is something that cannot be taught in a classroom. When our student representatives c-ame back from the meeting, they were able to meet with our student chapter and share what they learned as poster presenters as well as symposium attendees. Showing students in our university in different ways that a career in chemistry can open many doors is the first step to encouraging them to pursue a career in chemistry.

*What challenges did you face in any part of the planning, delegating, advertising or implementing of your professional development activities?**

One of our challenges in implementing our professional development activities was reaching out to the greater community. We a-ttempted to plan a chemistry career fair, where we would bring in professionals in various fields of chemistry to sit at a table and explain his/her career to students. We were able to secure a representative from a toothpaste compay as well as a food chemist, but we were unsuccessful in securing more. We hope to run this event in the future by planning early on and reaching out to more people. We also would like to have more involvement with the local New York chapter and would like to attend more of their events. The Nichols Awards Symposium and Dinner in White Plains, NY, which was sponsored by the local New York chapter, was sch-eduled for a Friday. As a result, only our faculty advisor was able to attend the symposium, due to the religious observance of the Sabbath of student members. Should the symposium be moved to earlier in the day on Friday or to a different day of the week, our chapter would love to attend the meeting in the future. Also, the annual Earth Day Walk across the Brooklyn Bridge sponsored by the local New York ACS section was scheduled during the Passover holidays and we were unable to participate.?? We look forward to having more involvement with the local New York chapter in the future.

Professional Development Events

ACS Spring National Meeting

Date: 2019-04-01
Location: Orlando, FL
Type: Attending Scientific Meeting
Category: Professional Development
Audience(s): General Community
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 500
Number of ACS Student/Chapter Members: 3
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Three student chapter members attended the ACS Spring National Meeting in Orlando and presented their research at the Undergraduate Research Session. A National Meeting T-ravel Grant was received to help defray travel costs. The abstracts of the posters are: Sharvit E., Nik S., Bowman T. V., 2019, ATM Signaling Pathway Mediates Apoptosis in sf3b1 Mutant Zebrafish, 257th National Meeting of the American Chemical Society, Orl-ando, FL, April.Dembitzer N., Drori R., 2019, Antifreeze Proteins Shape Ice Crystals to Prevent Freezing Injury, 257th National Meeting of the American Chemical Society, Orlando, FL, April.

Faculty Research Presentation

Date: 2018-11-14
Location: Stern College for Women
Type: Hosting Presentation/Speaker
Category: Professional Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 15
Number of Faculty: 2

Description: Our club hosted a talk with one of our professors on campus, Dr. Ran Drori, about the research he conducts in his lab with anti-freeze proteins. A handful of students in our university work in Dr. Drori's lab and had their individual research projects featured in his presentation. The event was enjoyed by all who attended!

Student Research Presentations

Date: 2019-03-05
Location: Stern College for Women
Type: Hosting Presentation/Speaker
Category: Professional Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 10
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 0

Description: Two students presented their research in preparation to present at the ACS National Meeting in Orlando, FL.

Chapter Development

*What do you actively do to recruit and retain members as a chapter? In addition, what recruitment/retention challenges does your chapter experience?**

Every year we send out an application to join the Chemistry Club board. The link is emailed out to the entire student body, and anyone who is interesed, no matter their major, is encouraged to apply. We also approach students that we think would be good candidates for the board and encourage them to apply as well. We always hang up fliers and send out tons of emails before every event to encourage more students to attend our events. We also advertise our club at the two club fairs that are hosted by our school each year, and we bring materials and pictures from past events to show students the types of events we host. We encourage students to let us know what kinds of events or activities they would be interested in in order to make the club interested for everyone. Once a student is selected to be a part of our board, they are required to attend and help promote all of our events. At the end of each event, we always let the atendees know about our next upcoming event so that students will feel encouraged to attend more of our chemistry club events.??Our most useful tool to recruit members is by hosting events, and unfortunately there are sometimes issues with the Office of Student Life at our school that makes it difficult to effectively plan events. For example, sometimes the room is changed at the last minute, or the food order is incorrect, leaving students annoyed about coming to future events. Furthermore, even though our university is not technically a commuter school, most students leave on Thursday afternoon and return late Sunday night, giving us only Monday-Wednesday to host events. However, since there is almost always a big science exam each week, and since most of our target students are science majors, there are many times when we lose a huge part of our potential audience because students are studying for upcoming science exams. There is also a widspread culture at our college where many students also will not take time to attend events "just for fun", and in general do not attend events unless they are mandatory or necessary for graduate school. This makes it harder for us to recruit new members to join our chapter and attend our events, since we cannot necessarily offer extra credit or prizes for each of our events in exchange for attendance.

*What specific events do you host to bond and promote camaraderie among your chapter?**

We formed a What'sApp group chat at the beginning of the year that included all of our board members. We mainly use the chat to share information about upcoming events or ideas for future events, but we also use the chat as a means for fun communication, such as sending jokes or funny chemistry pictures to the group. Also, when a board member is planning an upcoming event, we encourage everyone in the chat to contribute with unique ideas or details that would enhance the event. We also match up board members from different years, so that each event can feature different perspectives and accomodate everyone. At the beginning of the year, we held a board meeting where everyone introduced themselves and suggested which element they most identify with, as a fun way to get the board members to interact and become friends. We also encourage socializing at the end of each of our events, both with board members and with new faces, as well as with our speakers. We designed and purchased ACS Stern College pens at the beginning of the year that had a green highlighter on the end, and we distributed them to our board members as an exclusive treat for being on our board. We later shared them at the club fair with other students that were interested in our club. We also went on an outing to a local pinball arcade to celebrate because two of our board members had been chosen to present their research at the annual ACS conference in Orlando. We made sure to have a board meeting at the end of every event to share what worked and what didn't, so that each board member feels that their ideas and contributions are necessary and expected.??

*Describe how the chapter conducted executive and/or general meeting for business and planning. Specify frequency, attendance, delegation of tasks and the role of your advisor.**

At the beginning of the school year, the co-presidents presented the different obligations and responsibilities of the board members, such as our future meetings, events that the board members would be responsible to organize, and the public school event for the end of the year. We encouraged all board members to contribute ideas and criticism based on previous years so that our events would run smoothly, and to make sure that the public school event would be fun and educational. We also met at the end of the year to review all of our activities and to nominate two presidents for the upcoming year. All board members were expected to attend all of the sessions. We split up responsibilities based on the experience of the board member (i.e. if they had been on the board in previous years) and based on the board member's year in college (i.e. freshman vs. senior). The newer students were matched up with older students in planning events so that the newer students could learn how to effectively host an event. The co-presidents set the agenda for each meeting, and all board members were required to attend every meeting. We also held review meetings after each event to bond the group together.Our advisor was heavily involved in the planning and execution of each event. The co-presidents updated our advisor, whether in person or over emails, each week on past activities and future events. He also helped us to order all of our materials through our school using our grant money, and he made suggestions for our events based on his experience with previous chemistry club presidents. We would present him with our ideas, our outline, and the logistics for the event, as well as what materials we needed him to order. He would also check up with us to be sure that the event was approved by the school and he would advertise our event in his classes.??

Chapter Development Events

Bulletin Board

Date: 2018-09-04
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 1000
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 2

Description: Each year, our chapter decorates a bulletin board in the science department of our university. To promote our theme of Green Chemistry for the Future, we decorated the bulletin board with green paper this year and included many aspects of green chemistry that are easy for students to understand. We included tips for being more green and some fun science humor to give students a good laugh as they read through the bulletin board. We chose to use a bulletin board right by the elevator so that students and faculty would be able to see it on a regular basis. We also included publications from our faculty to promote careers in chemistry.

Chapter Business Meeting

Date: 2018-10-16
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: We convened a meeting of our chapter board members to discuss the events that we wanted to run throughout the year and the positions that each board member would hold on the board. We discussed how to advertise our events, and came up with a design for our club's information board that is posted in the Stern College for Women building.

Chapter Business Meeting

Date: 2019-02-04
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Our chapter board members met to discuss our spring semester events, primarily the Magic Show and Community Interaction program. We split up the magic tricks that each person would perform, tested them out to ensure that they worked properly. We then decided on the projects that we would be doing with the kids at the Henrietta Szold PS 134 school. This meeting was very productive as we organized our main events during this time.

Chapter Business Meeting

Date: 2019-04-15
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Our chapter met to discuss the year as a whole. We spoke about the strengths and weaknesses of our chapter in regards to in-house events, outreach to our local community, and outreach to the broader community. We announced the chapter leaders for the 2019-2020 school year and provided each of our chapter members with the chance to give us invaluable feedback.

Chapter Celebratory Event

Date: 2019-03-05
Location: Pinball Arcade
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 0

Description: After the successful presentations of two of our own chapter members for one of our events, our chapter went to a pinball arcade to celebrate the accomplishments of our chapter members. This evening provided our chapter with camaraderie, proving to us that things do not need to be all business all the time.

Chapter Meeting/Get-Together

Date: 2018-11-14
Location: Stern College for Women
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 10
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: After hearing a presentation from one of our professors at the university, our chapter convened to discuss the event and enjoy light refreshments. This was an opportunity for chapter members to get to know one another in a less-formal setting and form bonds with one another to propel our chapter through the year. We also had the chance to speak with our presenter, who provided us with ideas on how to get more student involvement for various events throughout the year.

Chapter Meeting/Get-Together

Date: 2018-12-04
Location: Stern College for Women
Type: Social
Category: Chapter Development
Audience(s): My Student Chapter
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 0
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 0

Description: After our themed jeopardy evening, our chapter met to debrief the event. We discussed what worked and what didn't work, as well as enjoyed refreshments with one another and had the chance to have another informal get-together.

Chemistry and Hannukah Jeopardy!

Date: 2018-12-04
Location: Stern College for Women
Type: Social
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 20
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 0

Description: To celebrate the Jewish holiday of Hannukah, our student chapter had a fun night of chemistry and Hannukah themed jeopardy! The game featured chemistry questions, green chemistry questions, Hannukah questions, and combination questions. The two teams were neck and neck until the very end when a tie-breaker question was used to determine the winning team!

Fall Club Fair

Date: 2018-10-10
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 150
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Fall Club fair to introduce the chemistry club to new students, to recruit members for the club, and to explain all the activities we have planned for the year. Additionally, we handed out pens with the ACS logo that were green in order to promote our chapter's theme for the year, Green Chemistry for the Future.

Research Poster Competition

Date: 2018-09-05
Location: Stern College for Women
Type: Competition/Contest
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 25
Number of ACS Student/Chapter Members: 3
Number of Non-ACS Chapter Members: 15
Number of Faculty: 10

Description: We held a poster competition for undergraduate students at our university to provide them with a chance to present research they helped conduct over the summer. A panel of faculty judges selected two students as winners to go on to the ACS National Meeting in Orlando, FL to present their research at the undergraduate portion of the meeting.

Spring Club Fair

Date: 2019-02-06
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 150
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: Club Fair to recruit student and to promote our events.

Budget

*Please provide a budget narrative to accompany your budget sheet and include information such as: What is your primary or most effective form of fundraising and why? How did fundraising help members develop professional experience (sales skills, grant writing, etc.)? Did you have enough money to accomplish your goals for the year? NOTE: all chapter expenses and chapter income must be included on your budget sheet.**

Our source of revenue was our $500 ACS Community Interaction Grant, which was matched by our university. For our event at the New York Hall of Science, we ordered plastic easter eggs, alka seltzer tablets, and disposable cups. We arranged all the materials so that each child that came to our stand would be able to conduct his own experiment. Each year, the chemistry club designs a huge bulletin board in the science wing, so we ordered construction paper and metallic streamers to design it. For our event at the public school, we ordered Clorox wipes with bleach and Lysol wipes without bleach to demonstrate the effectiveness of both. We also ordered 140 lemons from a local grocery story, and purchased multiple mini fruit powered circuits to construct our lemon powered batteries and to light up LEDs. Lastly, we ordered ACS/Stern College for Women pens that had a green highlighter attached to spread the word about our club and to encourage students to attend our events. We used the remaining funds to purchase materials for the public school for earth day science activities, such as constructing and operating solar-powered racecars.??

Green Chemistry

*Please provide a detailed summary of a minimum of three green chemistry activities, including a two to three sentence explanation of why you think each activity qualifies as green chemistry.**

Chemistry is Out of This World!:??We participated in an outreach event at the N.Y. Hall of Science to celebrate NCW. The clubs activity involved making egg rockets. We made the rockets by releasing pressurized carbon dioxide dissolved in liquid. This allowed us to shed some light unto NASAs new ideas for rocket fuel production on Mars. This activity qualifies as green chemistry as it introduced participants to the idea of alternative rocket fuels. Children and their parents all got to see an understandable form of potential fuels that could be used in the future as a more environmentally-friendly alternative to the current fuels.??Fall Club Fair-:??We introduced the chemistry club to new students, recruited members for the club, and explained all the activities we had planned for the year. Additionally, we handed out pens with the ACS logo that were green in order to promote our chapter's theme for the year, Green Chemistry for the Future. This activity qualifies as green chemistry because the green pens were an unusual color, prompting students to ask why they were green. This gave us the chance to explain what green chemistry is and provide some helpful tips for being green in the home and lab.??Chemistry and Hannukah Jeopardy!:??To celebrate the Jewish holiday of Hannukah, our student chapter had a fun night of chemistry and Hannukah themed jeopardy! The game featured chemistry questions, green chemistry questions, Hannukah question, and combination questions. This activity qualifies as green chemistry as it involved questions which tested students knowledge on green chemistry. The combination questions allowed the students to apply their preexisting knowledge of general chemistry and Hannukah to the green chemistry aspects of them. The questions led to further discussions of what we, as students, can do in our own labs to make them more green.??Magic Show:??Magic Show held for chemistry students by our board members. During this event, we highlighted the importance in carrying out laboratory experiments in as safe a way as possible for both ourselves and the environment. This activity qualifies as green chemistry as it gave students the opportunity to see examples of green chemistry with their own eyes in a laboratory setting.????PS 134 Outreach:??Outreach program held for students at PS 134 to teach them the importance in green chemistry, with a focus on Earth day. Three demonstrations/activities were done with the students to stress the importance in making choices that benefit our environment, both in the laboratory and at home. This activity qualifies as green chemistry as it taught students, some as young as five years old, about the concept of green chemistry. Elementary-aged students are not old enough to understand green laboratory techniques, so we made it relatable by demonstrating with products that they use in their own homes: cleaning wipes and batteries. We did the seltzer-rocket demonstration to show what kind of impact green chemistry can have in other aspects of our lives.

Green Chemistry Events

Chemistry is Out of This World!

Date: 2018-10-21
Location: New York Hall of Science
Type: Outreach/Service to Community
Category: Service
Audience(s): General Community
NCW/Mole Day/CCED: NCW
Number of People Served (Audience): 300
Number of ACS Student/Chapter Members: 4
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: The chemistry club participated in an outreach event at the N.Y. Hall of Science to celebrate National Chemistry Week. In line with this years theme of Chemistry is out of this World," the clubs activity involved making colored egg rockets. We made the seltzer rockets byreleasing pressurized carbon dioxide dissolved in liquid. This allowed us to shed some light unto NASAs new ideas for rocket fuel production on Mars. This experiment was conducted by filling half of an Easter egg with water and Alka seltzer tablets. We quickly closed the egg and waited for the egg to pop open! We will explained that the buildup of the released carbon dioxide from the Alka seltzer tablet forced the egg to pop open so that the pressure can be released.

Henrietta Szold PS 134 Outreach

Date: 2019-04-12
Location: 293 East Broadway, New York, NY 10002
Type: Outreach/Service to Community
Category: Service
Audience(s): Local Elementary School
NCW/Mole Day/CCED: CCEW
Number of People Served (Audience): 250
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Outreach program held for students at PS 134 to teach them the importance in green chemistry, with a focus on Earth day. Three demonstrations/hands-on activities were done with the students to stress the importance in making choices that benefit our environment, both in the laboratory and at home. The first demonstration showed the students that "green" cleaning wipes, which do not contain bleach or other harmful chemicals, are just as effective as the wipes which do contain bleach. The students then did two experiments on their own: Easter egg rockets and lemon batteries. The Easter egg rockets consisted of students using an alternative fuel source (alka-seltzer and water) to make their rockets "take-off." The lemon battery experiment gave students the chance to build a circuit and light up a LED light using an alternative energy source, lemons!

Magic Show

Date: 2019-04-08
Location: Stern College for Women
Type: Outreach/Service to University
Category: Service
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 60
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 5
Number of Faculty: 4

Description: Magic Show held for chemistry students by our board members. "Magic tricks" included elephant's toothpaste, molten gummy bear, magic milk, flame tests, and polymer making. During this event, we highlighted the importance in carrying out laboratory experiments in as safe a way as possible for both ourselves and the environment.

Resources for PS 134

Date: 2019-04-30
Location: PS 134
Type: Outreach/Service to Community
Category: Service
Audience(s): Local Elementary School
NCW/Mole Day/CCED: CCEW
Number of People Served (Audience): 200
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 2

Description: Supplies were purchased for the science department in PS 134 for continued education on Earth day and green chemistry. PS 134 is the school we go to each year to do outreach with and we felt our remaining funds should be used for their teachers to be able to continue our lessons in green chemistry with their students. PS 134 is a Tier 1 school. As a result, they have little funding for extra-curricular activities like science. Purchasing these materials helps to maintain our university's relationship with PS 134 as well as give the students more exposure to STEM projects. The teachers at PS 134 requested solar panel car kits. These kits give students the chance to invent and build, using concepts that they learned with us and with their teachers.

Bulletin Board

Date: 2018-09-04
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 1000
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 2

Description: Each year, our chapter decorates a bulletin board in the science department of our university. To promote our theme of Green Chemistry for the Future, we decorated the bulletin board with green paper this year and included many aspects of green chemistry that are easy for students to understand. We included tips for being more green and some fun science humor to give students a good laugh as they read through the bulletin board. We chose to use a bulletin board right by the elevator so that students and faculty would be able to see it on a regular basis. We also included publications from our faculty to promote careers in chemistry.

Chemistry and Hannukah Jeopardy!

Date: 2018-12-04
Location: Stern College for Women
Type: Social
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 20
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 10
Number of Faculty: 0

Description: To celebrate the Jewish holiday of Hannukah, our student chapter had a fun night of chemistry and Hannukah themed jeopardy! The game featured chemistry questions, green chemistry questions, Hannukah questions, and combination questions. The two teams were neck and neck until the very end when a tie-breaker question was used to determine the winning team!

Fall Club Fair

Date: 2018-10-10
Location: Stern College for Women
Type: Chapter Business Function/Fundraising
Category: Chapter Development
Audience(s): My University/Department
NCW/Mole Day/CCED: N/A
Number of People Served (Audience): 150
Number of ACS Student/Chapter Members: 10
Number of Non-ACS Chapter Members: 0
Number of Faculty: 1

Description: Fall Club fair to introduce the chemistry club to new students, to recruit members for the club, and to explain all the activities we have planned for the year. Additionally, we handed out pens with the ACS logo that were green in order to promote our chapter's theme for the year, Green Chemistry for the Future.


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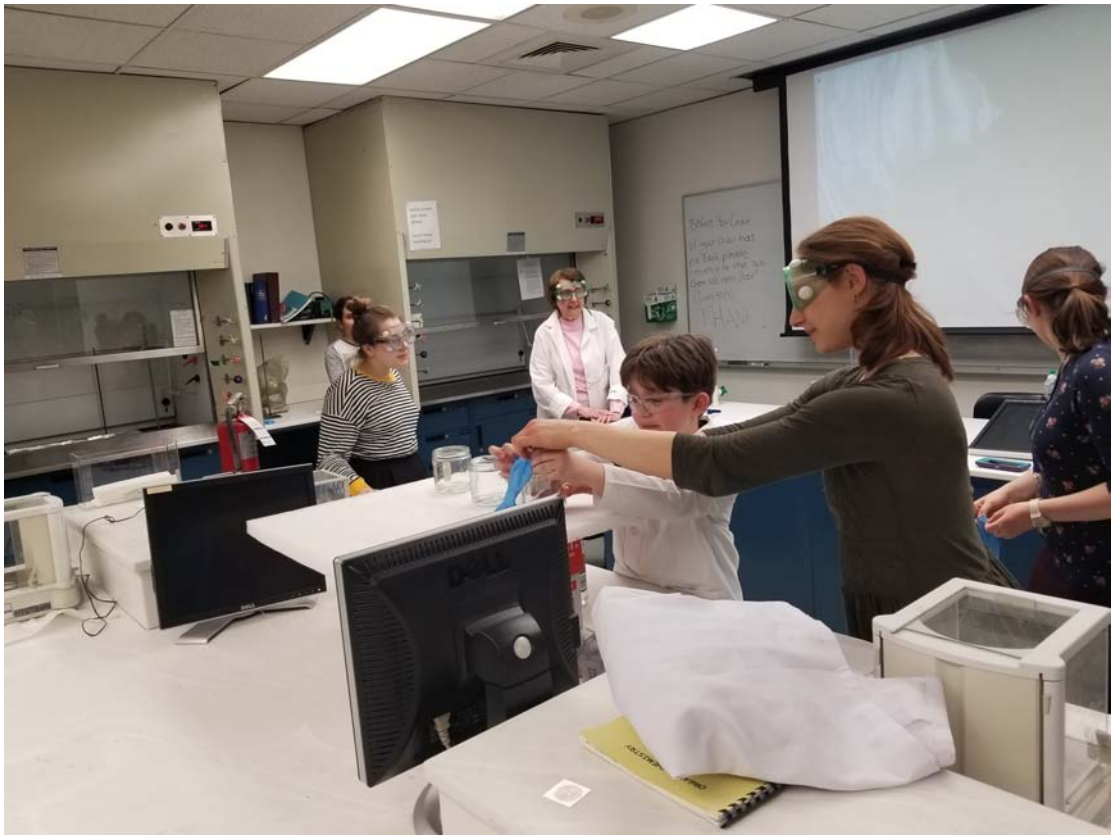


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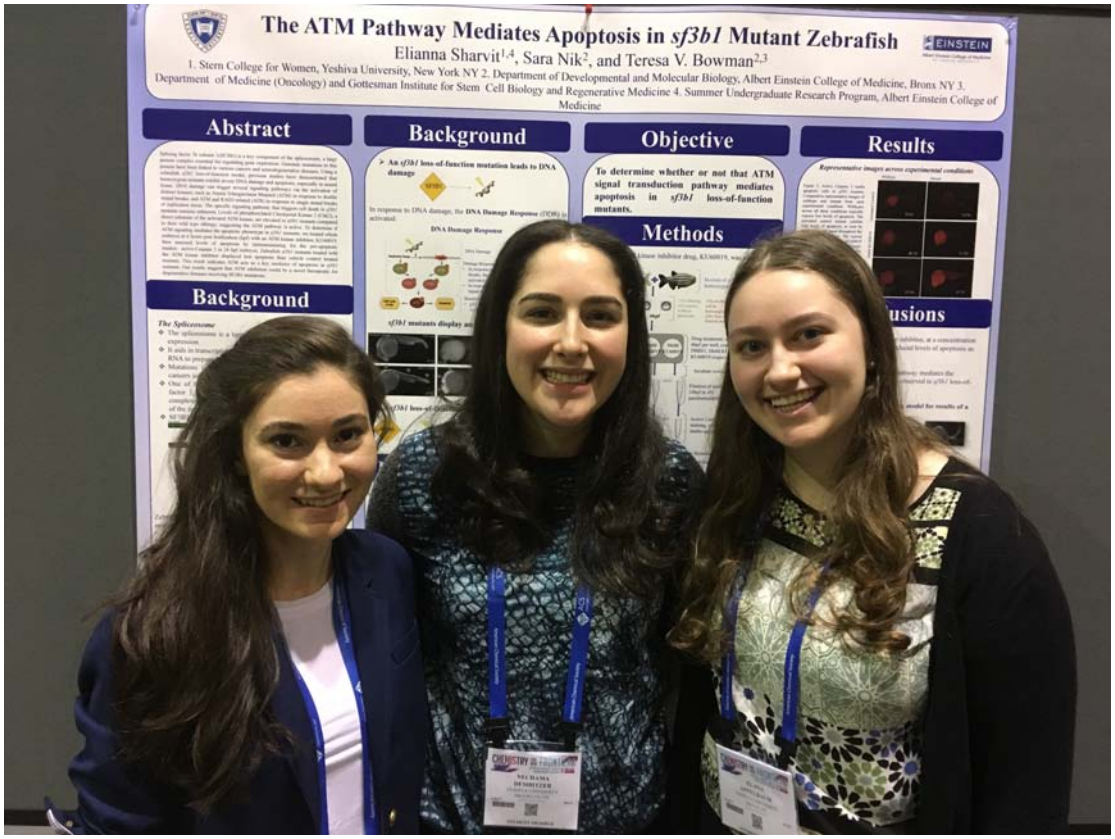
The ATM Pathway Mediates Apoptosis in sf3b1 Mutant Zebrafish
Elianna Sharvit[1,4], Sara Nik[2], and Teresa V. Bowman[2,3]
1. Stern College for Women, Yeshiva University, New York NY 2. Department of Developmental and Molecular Biology, Albert Einstein College of Medicine, Bronx NY 3. Department of Medicine (Oncology) and Gottesman Institute for Stem Cell Biology and Regenerative Medicine 4. Summer Undergraduate Research Program, Albert Einstein College of Medicine
EINSTEIN
Abstract
Background
Objective
To determine whether or not that ATM signal transduction pathway mediates apoptosis in sf3b1 loss-of-function mutants.
Results
Methods
Background
The Spliceosome
An sf3b1 loss-of-function mutation leads to DNA damage
DNA Damage Response
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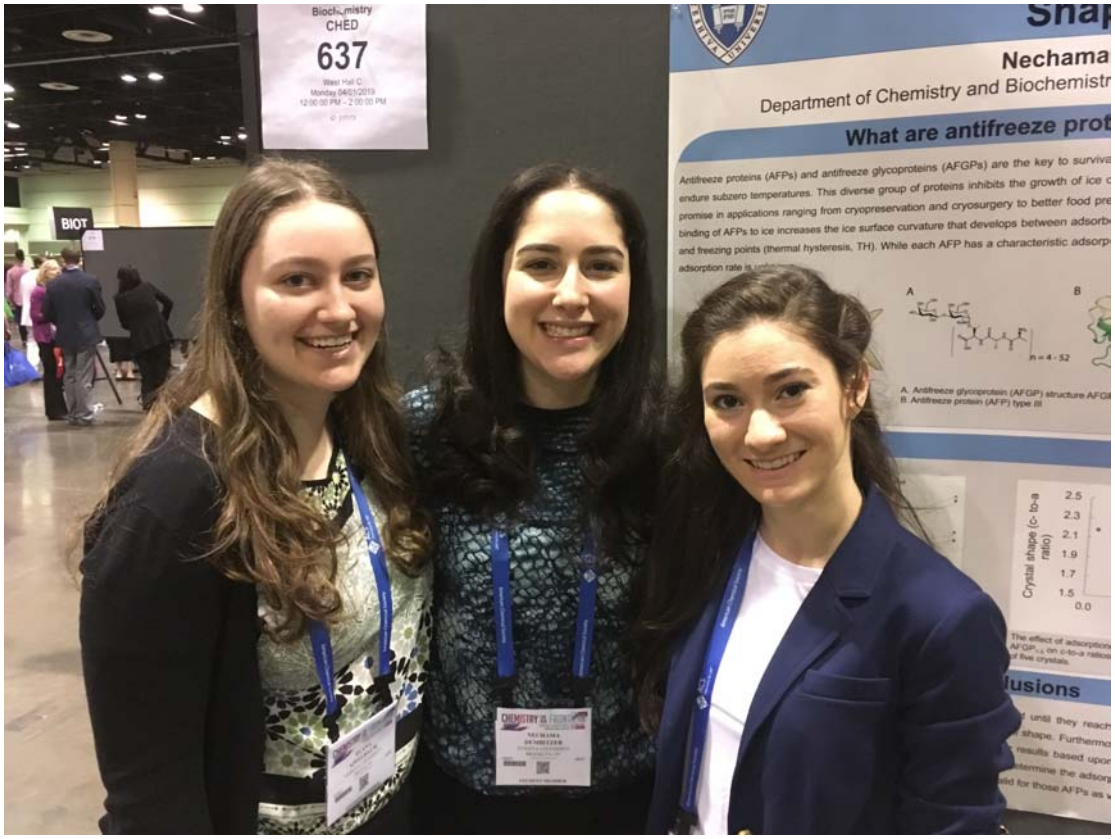
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What are antifreeze prot
Antifreeze proteins (AFPs) and antifreeze glycoproteins (AFGPs) are the key to survival
endure subzero temperatures. This diverse group of proteins inhibits the growth of ice c
promise in applications ranging from cryopreservation and cryosurgery to better food pre
binding of AFPs to ice increases the ice surface curvature that develops between adsorbe
and freezing points (thermal hysteresis, TH). While each AFP has a characteristic adsorp
adsorption rate is
A
B
n = 4 - 52
A. Antifreeze glycoprotein (AFGP) structure AFG
B. Antifreeze protein (AFP) type III
Crystal shape (c- to-a ratio)
2.5
2.3
2.1
1.9
1.7
1.5
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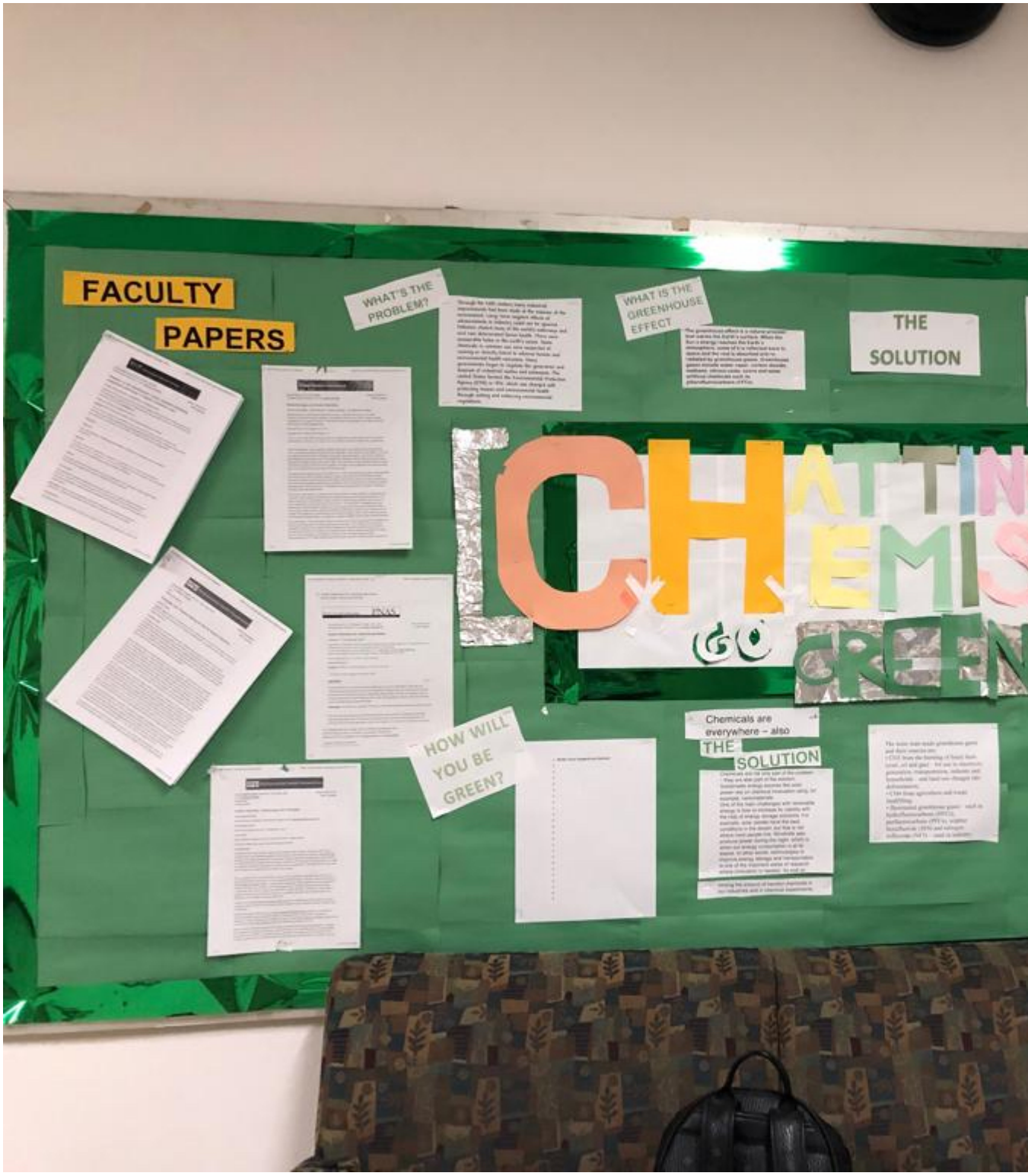
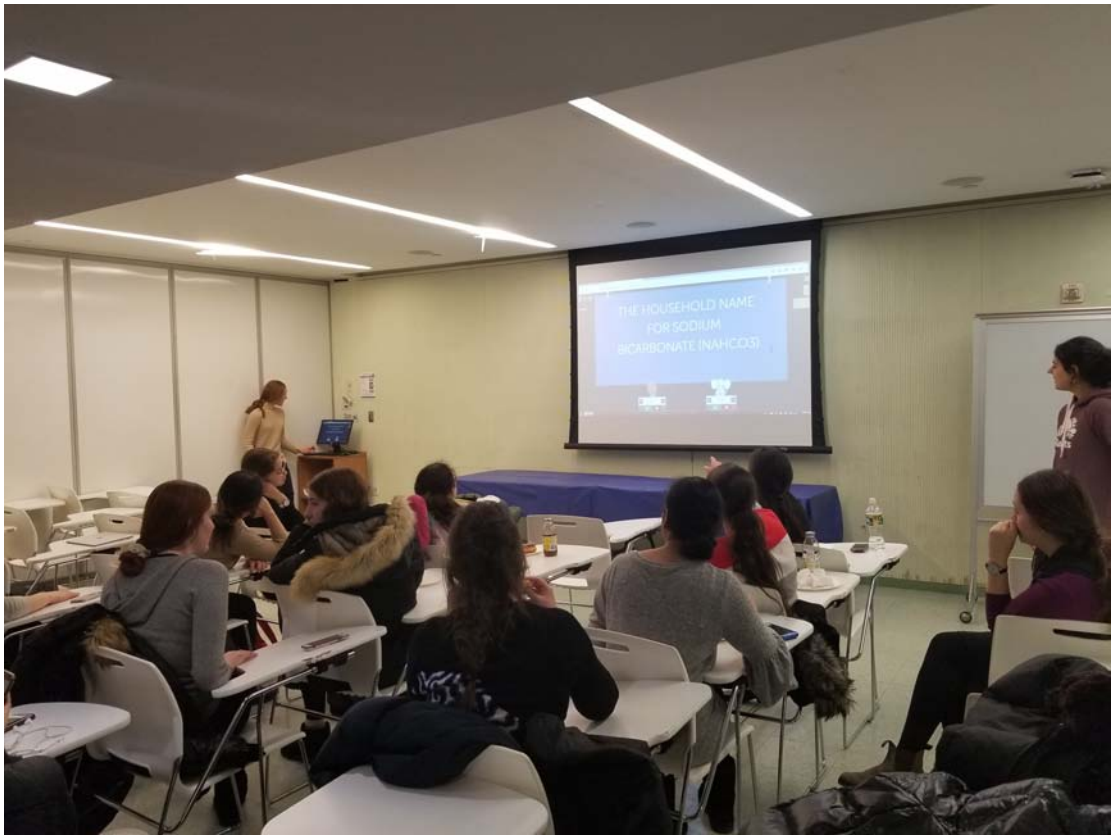
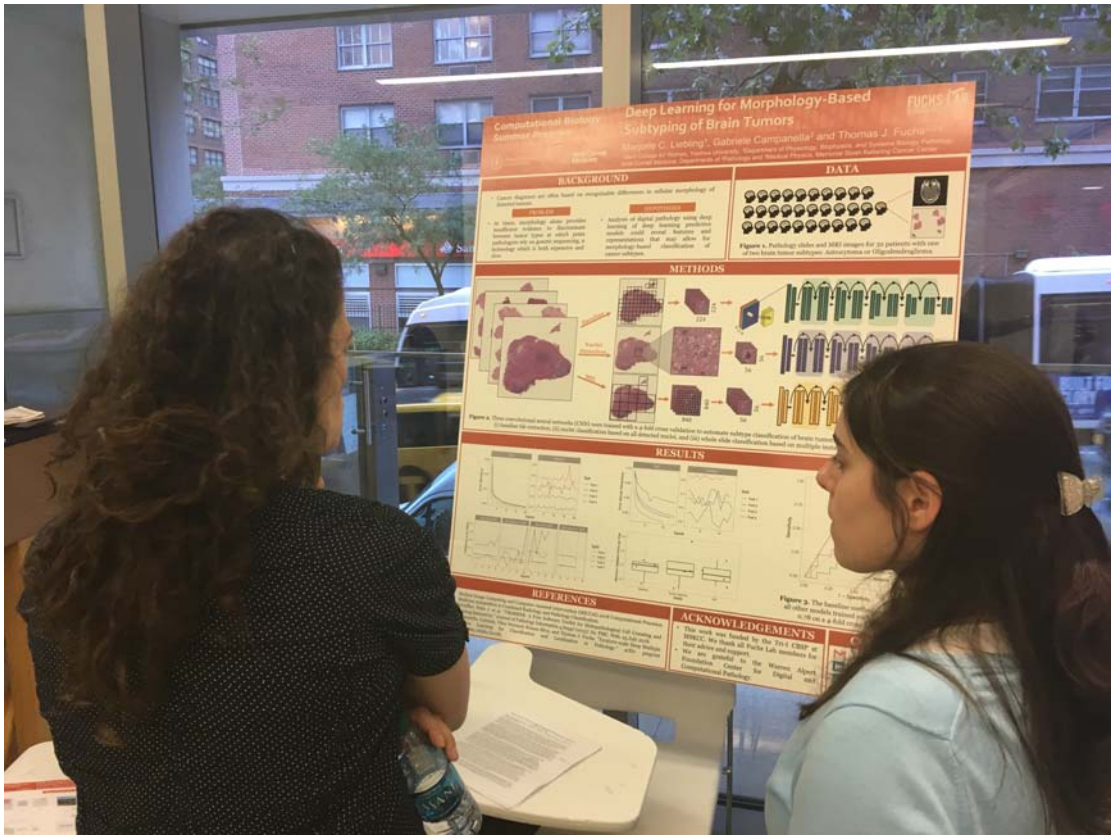

FACULTY
PAPERS
WHAT'S THE PROBLEM?
WHAT IS THE GREENHOUSE EFFECT
THE SOLUTION
CHEMIS
GO
GREEN
HOW WILL YOU BE GREEN?
Chemicals are everywhere – also
THE
SOLUTION


REPLAY AT


THE HOUSEHOLD NAME
FOR SODIUM
BICARBONATE (NAHCO3)


Antifreeze Proteins Prevent Freezing Injury by Shaping Ice Crystals
Nechama Dembitzer and Ran Drori
Department of Chemistry and Biochemistry, Stern College for Women, Yeshiva University, New York, NY.
What are antifreeze proteins?
Experimental
Results
Conclusions
References


Deep Learning for Morphology-Based Subtyping of Brain Tumors
BACKGROUND
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ACKNOWLEDGEMENTS


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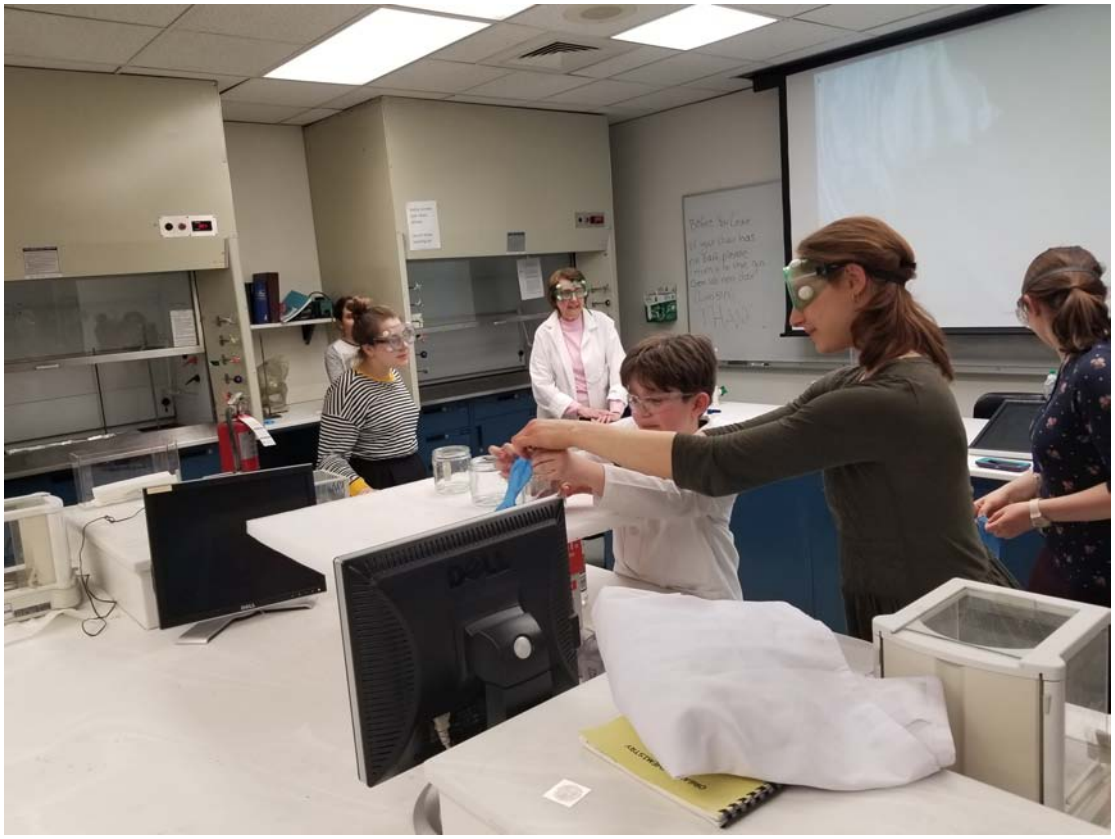


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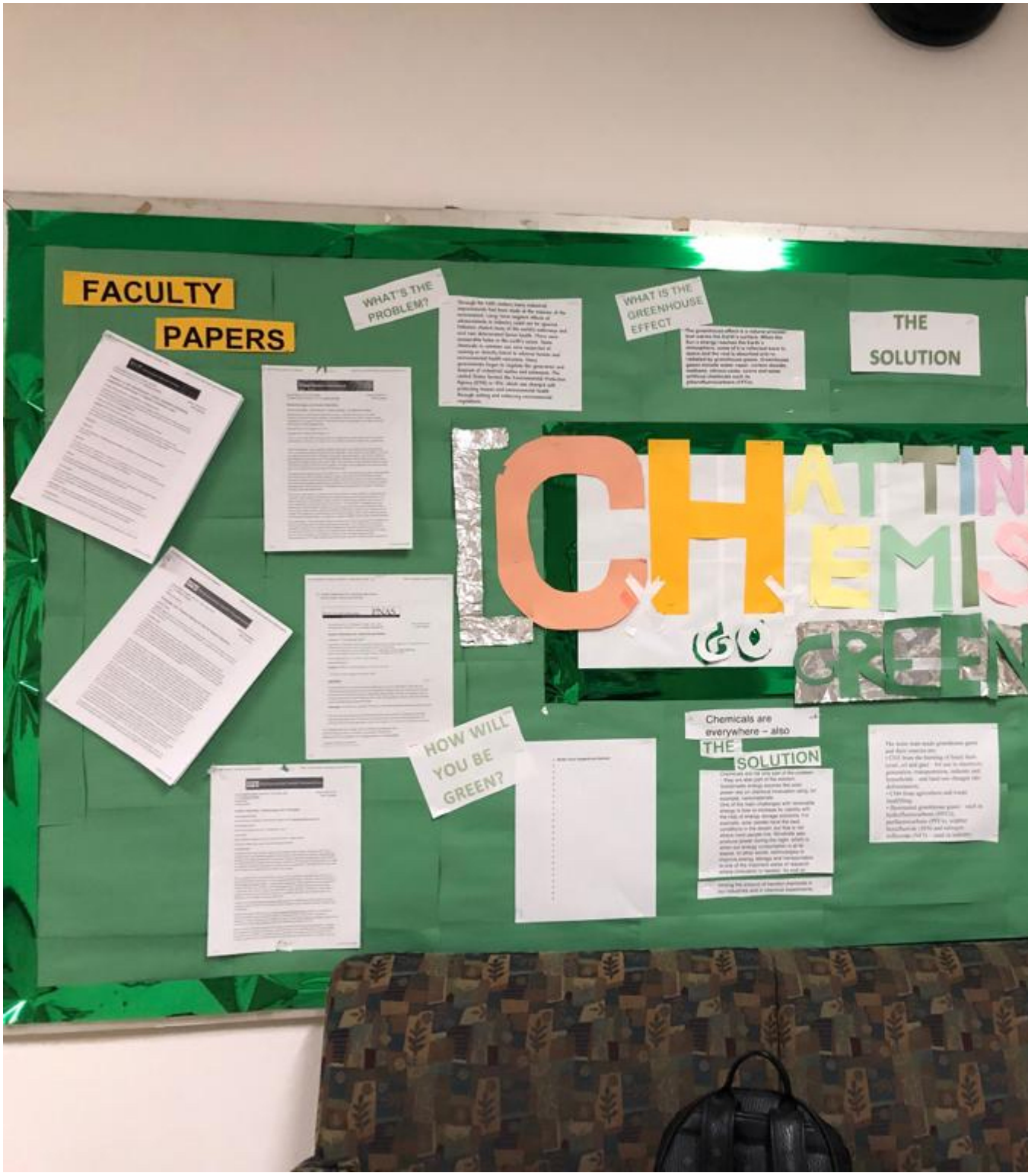
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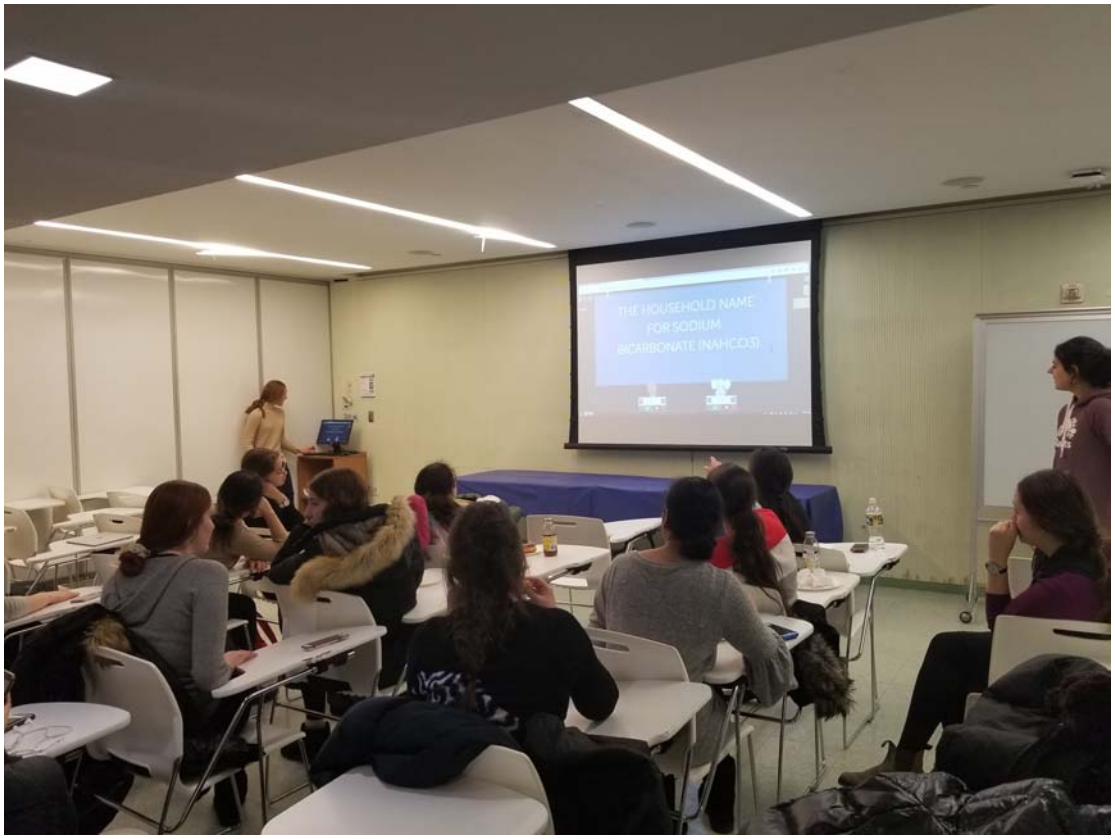
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