THE ACADEMY OF NATURAL SCIENCES

of DREXEL UNIVERSITY

1900 Benjamin Franklin Parkway Philadelphia, PA 19103



Dates to Remember...

WELCOME NEW WINS I

You will get a final schedule your first day of class, but mark down these dates!!

Wednesday, July 6th: First Day! Academy of Natural Sciences 10:00am to 3:00pm

August 15th to 19th: Trip to Poconos **Environmental Education Center**

WINS II

Wednesday, June 29th: Customer Service Training for ALL Explainers and Interns, ANSP 9:30am to 4:00pm

Thursday, June 30th: Workshop: Drexel High School Scholars Program and **UPenn School of Medicine** ANSP 9:30am to 12:00pm

Thursday, July 28th: Field Trip! Kayaking Meet at ANSP 8:30am, return by 4:00pm

Thursday, August 11th: Workshop: Teen Dating Violence ANSP 9:30am -12:00pm

Tuesday, August 23rd Field Trip! WINS II **USDA Presentations & Wyck Garden** Meet at ANSP 9:00am, return by 4:00pm

WINS Newsletter

Editors Betsy Payne Kimberly Godfrey

Contributors Mazina Adams N'aignae Starnes

Fionna Truong

Send your comments or questions to: Betsy Payne, WINS Manager The Academy of Natural Sciences of Drexel University l 900 Benjamin Franklin Parkway Philadelphia. PA 19130 (215) 299-1064 (215) 299-1165 fax

Happy Birthday!

2nd - Muneeba Arshad

3rd - Linda Gutierrez

6th - Trinity Niroda 14th - Mazina Adams

17th - Jada Catanch

11th - Khadijah McGriff

14th - Jasmin Gillian 20th - Kavla Savage

24th - Leilani Cintrón

6th - Aurora Ryan

12th - Jiciana Knight



All activities are rain or shine!

Please let Ms. Betsy know if you cannot make it to an activity beforehand.

THE ACADEMY OF NATURAL SCIENCES O DREXEL WRITERARTY

Women In Natural

Sciences (WINS) is an innovative and successful science enrichment program conducted by the Academy of Natural Sciences of Drexel University in collaboration with the School District of Philadelphia. Since its founding in 1982, WINS has been providing female public school students with hands-on science classes, scientific literacy and skill-building activities, and opportunities for personal growth in a uniquely nurturing setting.

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Mazina Adams, right, and Kayla Savage

learning about waste at the Camden

County Resource Recovery Center as

part of their WINS I summer of 2014.

Dad learning from WINS

WINS Newsletter

When I first started WINS, Ms. Betsy was focused on teaching about the environment; how to take care of the environment, how to slow down climate change, and how to be people who take care of the environment. Me and my Dad are very close. We tell each other everything, so I always go home and watch TV with my Dad and I would always tell him about things we learned in our WINS meeting that day.

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My Dad wasn't the best at taking care of the environment, he always drove his car if he needed to go somewhere like even if it was only 2 blocks away. Everything changed slowly but surely after I came home from PEEC. PEEC is an environmental place that WINS I girls go to and stay for a few of days to learn about the environment, the animals in the area, and get in a lot of exercise. During most of the free times all the girls would search for signal to call their parents. I always called my Dad to tell him about what I did that day and what I also learned.

I was shocked - my Dad was never really a science guy, he just never was - but slowly when he would ask about my day in WINS he would add in info that he usually didn't know. When school started back up sometimes I would go home and see him researching a topic that we talked about in WINS. That day that I learned about Biodiversity I saw my dad researching the next day. He told me to sit down and that he wanted to explain something to me. The day before that I had told him about how losing a couple of fishes wouldn't be a big deal in my eyes. But he suddenly had so

much information ready to tell me, he told me how everything is connected to each other. If we lost the fishes a lot of things would become unbalanced. If the predator that ate the fishes didn't have fishes then they would have to find another food source which means a lot of movement in the food web. I was completely shocked it was like my Dad was going to WINS with me.

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But the moment that I realized the most change was when WINS had a class on climate change and all of the major elements that are causing it. When I went home to tell my Dad, I had to go into a detailed explanation of how cars were one of the big causes. My Dad after that seemed to get a little quiet about science; I got worried because he went from being so excited to not talking about it. What I didn't know is that he was slowly trying to stop driving his car so much. I didn't know until I was walking home from school and ran into my Dad, I was so shocked I just froze and couldn't comprehend what I was seeing. Unless we were indoors or walking to the car I never saw my Dad walk so seeing that just was amazing. I asked him what he was doing so far from the house, he answered with, "you know what Ms. Betsy says, walking's good for you".

Being a part of WINS hasn't only changed my life or impacted just mine, it has helped my family. My Dad is becoming healthier walking more, my Mom is starting to recycle a lot more, and my Grandma has a small garden in front of her house. WINS is so much more than a program where you just go to learn things about the world. It's a lifestyle, where you can find yourself, figure out who you want to be, inform others, and even help other people become better informed about the environment we're living in.

Mazina Adams, WINS II



4th - Tenzin Chemi

6th - Alexis Ryan

My experience in WINS

My experience in WINS has been by far, the greatest and funnest one yet. Every trip and lesson that we have brings enlightenment and contains valuable information. Without it, I don't think I would be the person I am today. WINS isn't just a program to me. It defines who I am: a girl who just loves science.



Fionna Truong, in August 2013 - tours have now become her first summer in WINS. some of my top choices.

Before being a part of WINS, I had absolutely no clue what I wanted to do, where I wanted to go to for university- At the rate I was going, I was going to end up being a full-time internet hobo. College tours in WINS opened my eyes in so many ways. All the institutions catered to different types of people's needs. Several of the colleges that I've seen on the tours have now become some of my top choices.

This year, I got the most amazing opportunity to work alongside people like Dr. Mark Sabaj Perez and Jason Poole. From them, I learned things that I never even dreamed of learning. Things like this would include preparing dinosaur fossils that were millions of years old (millions of years old-Who would have thought?!), and x-ray fish from different parts around the world (an actual dream come true). From these scientists, I learned many



Fionna working at her lchthyology internship in summer 2015 under the mentorship of Dr. Mark Sabaj-Perez and Kyle Luckenbill

valuable skills and assets that would prove beneficial in my later life. While working alongside them, something had clicked in my head. I realized that all along, I wanted for my career to focus on the sciences. Without even knowing it, WINS has been helping me all along in so many ways.

WINS has broadened my horizons and got me to try new things. Touch a cockroach (despite almost crying)? Check. Hike miles up a mountain while freezing my butt off? Check. You name it, I'll do it.

Through the years, I've met so many people, young and old. There wasn't one person that I did not learn from. Every trip that I go on really encourages me to continue loving science. Every class gives me better knowledge of the specific content. The little steps that I take now will eventually become a huge leap to my success. WINS really ties my education altogether to make me a well-rounded, professional and confident individual. I really love WINS and hope to continue being a part of this community.

Fionna Truong, WINS II

WINS Seniors 2015-16

Congratulations to our Seniors!! All sixteen girls have been accepted and are in the process of going to college in the fall.

Those staying in Philadelphia are Ti"anna Cooper in Temple for chemistry, DaiJzanaée Martinez in Drexel for nursing, and in CCP will be Allure Gray for Biology and Alexis and Aurora Ryan for Liberal Arts.

A little further away in Shippensburg will be Danielle Williams for Mass Media and Communications and Jiciana Knight for Pre-med, Tenzin Chemi in Brym Mawr for Biology, Kyjae Pannell in IUP for Accounting, Jada Parris at Albright College for Environmental Sciences and Studies, and Tamira Bell in the Univ. of Valley Forge for Intercultural Studies and Digital Media.

Out of state will be Jasmin Gilliam at The New School in NY for Art History and Museum Studies, Geré Johnson at the Univ. of Connecticut for Marine Biology, Tiarra Bell at the Rhode Island School of Design for Furniture Design, Alicia Vazquez in Rider Univ. in NJ for Global Studies and Imani Jackson at Xavier University of Louisiana currently undecided.



WINS Senior 2015-16 at the Senior trip at PEEC in January 2016. Back row: Geré. Alicia, Jada, Jiciana, Ti'anna, Allure, Imani and Alexis; Front row - Tamira, Kyjae, Danielle, Jasmin, DaiJzanaée, Aurora, Tenzin and Tiarra.

We wish all the girls best of luck, and we are looking forward to hearing their stories when they return from their first semester!

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Costa Rica and the "Mariposa Project"

Thanks to the Innovative Education award the WINS program received from the Underwriters Laboratories, we took a group of WINS to Costa Rica in April to study climate change, specifically how it affects butterfly populations. The goals of the "Mariposa Project" were to better understand how scientists study climate change in different habitats and in different countries focusing on a species; improve students' understanding of basic ecological principles and scientific methods, technique and terminology; and develop a broader knowledge of another culture. The participants are now in the process of developing lessons and activities for the museum and community festivals.

Who wouldn't want to go back to Costa Rica? Costa Rica was amazing to visit. This trip was a great experience for everyone who attended: 16 WINS girls, Ms. Betsy, Ms. Katie and Ms. Jacquie and her family. For a fact I can say that we all learned a lot of educational things, we had fun and bonded a lot.

While in Costa Rica there was a lot of information given to us to retain. The information was the highlight of our trip; the reason we were visiting some hiking sights, forests, and beaches. As a group we learned that the changes in vegetation change with altitude, we learned about the tree that will strangle its host after it establishes roots of its own. We also learned about hot springs in volcanos that smell really bad, kind of like sulfur or rotten eggs, and that some hot springs are too hot for someone to enter - you would burn to death. Last, the part I love since I work in butterflies at the Academy is the visit to "El Bosque Nuevo" butterfly farm. They raise butterflies in their farm, collect the pupas and ship them around the world.



The "Mariposa Project" participants in front of a strangler fig at the Parque Nacional Rincón de la Vieja in Costa Rica.

Although we were learning on our trip, the trip was very fun and I have a couple favorites about the trip. The Beaches were very nice, saltwater, minimum shells in the water, and nice relaxing environment. I also loved the waterfall we got to swim in - it was so beautiful. Another adventure that I really liked that may be a surprise to peo-



Naignae, in middle with baseball cap, enjoying one of her favorite spots in Costa Rica - the Cataratas de Cortés - along with Chelsea, Tara, Cash'e, Jaidah and Ariel.

ple was the muddy hike. I just like yucky things, but only when I'm prepared for things like that. The last activity I enjoyed to top it off and I'm pretty sure everyone else did was the last hotel we went to, to enjoy our last day. This hotel served us smoothies, they had 3 pools, and we went zip lining - it was so fun even though we lost Ms. Betsy at the end. It was a beautiful resort and the food was amazing. I think the last resort may be everyone's favorite.

To bring the whole trip together we learned and had lots of fun but we also bonded really well. Everyone knows in WINS that Ms. Betsy loves to split the cliques up and partner us with different people. Well, when she did this it actually taught more about each other instead of just your friends. I enjoyed rooming with all the girls and I learned different things about them including some things we have in common which I didn't know. Also we bonded with Ms. Jacquie's family we had a lot in common with her sons mainly sports. I loved her family; they're really funny and they were very interested about the sugar on my spaghetti. Last but not least everyone bonded over dinner; it was very nice to see a different side of everyone. We had no choice, we were together for about a week and a half.

Overall the trip to Costa Rica was and great experience for everyone, it was great seeing a different culture and seeing something besides the United States and Philadelphia. All the girls enjoyed themselves, got along, had fun and bonded with each other. If there is ever another opportunity like this I sure will take it.

N'aignae Starnes, WINS II