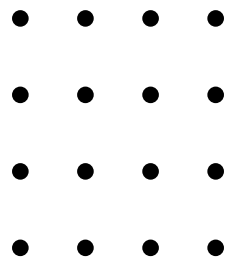


2022/2023



ANNUAL REPORT



Prepared By :

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**NEW YORK INSTITUTE
OF TECHNOLOGY**

Career Success &
Experiential Education



EDWARD GUILIANO GLOBAL FELLOWSHIPS

Since 2014, the Edward Guiliano Global Fellowship program generously awarded 185 New York Institute of Technology students the opportunity to broaden their perspectives and interact with the larger world through academic and cultural experiences. Through experiential-based learning outside their community and comfort zones, students have grown personally and professionally during their fellowships.

Open to New York Tech students on all campuses, these fellowships encourage students to:

Engage in research or artistically expressive, innovative projects around the world
Present original findings or work at conferences and symposiums
Support ideas to produce novel solutions or creative content

2022–2023 Snapshot

With the resurgence of travel and public gatherings, during the 2022–2023 academic year, 11 students were able to take advantage of funding provided by the Edward Guiliano Global Fellowship program. These students came from New York Institute of Technology's Long Island, New York City, and Vancouver campuses. The students visited 5 countries on 3 continents.

Program Highlights

Academic Year 2022–2023 brought continued growth, development and promotion to the fellowship. Both cycles saw a huge jump in applicant numbers, promotion across departments and new programming to include Brown and Stony Brook. Most notably:

- Increases to overall applicants; Summer/Fall 2022 brought 17 applicants. Winter/Spring 2023 brought 41 applicants. This is a 141 percent increase between cycles. The most current cycle, Summer, Fall 2023, brought 36 applicants; continuing this trend of a larger pool of applicants.
- Established a "New Fellows Orientation" where fellows are given travel advice, expense tracking, travel safety and more.
- Significant increase in promotion: posters, LinkedIn posts, social media blasts, emails to students, faculty and staff, promotion within classrooms, cross-department promotion.
- New branded merch with new logo; travel folders and zippable tote bags.
- Planning large "Edward Guiliano Global Fellowship Homecoming" by which all former fellows from New York Tech, Brown and Stony Brook will be able to network, share their projects and meet Edward.
- Organizing collaboration with writing center to improve applicant confidence in applying as well as quality of submitted applications.



EDWARD GUILIANO GLOBAL FELLOWSHIPS

Summer/Fall 2022

There were 8 Summer/Fall 2021 Fellowships for a total of \$18,005.01.

Following are updates from those fellows:

Miranda Reed

Major: DO Osteopathic Medicine

Campus: Jonesboro, Arkansas

Project Title: Vitamin Deficiency in the Dominican Republic

Project Location: Dominican Republic

Dates: June 11, 2022 – June 22, 2022

Project Description:

Miranda's experience in the Dominican Republic was an intense and intimate trip that transformed her as a medical provider and person. Miranda experienced working through a language barrier, a vastly different culture around medicine and dealing with patients enduring traumatic conditions. Most importantly, she overcame her own barriers as she began working more closely with patients after reserving herself to the pharmacy in the beginning of her trip. She states, "This trip did a lot of things for me personally. It allowed me to grow as a future provider, it exposed me to a different culture that values things differently than me, and it pushed me to learn a new language. I came back home a completely different person that values what I have so much more now. Something as simple as parasite free water to brush my teeth with will be appreciated so much more now, a resource that I have always overvalued. This trip was invaluable to me and I am so thankful that I was able to have this experience, it has truly made me a better person."





EDWARD GUILIANO GLOBAL FELLOWSHIPS



Mahlaqa Butt

Major: DO Osteopathic Medicine

Campus: Old Westbury

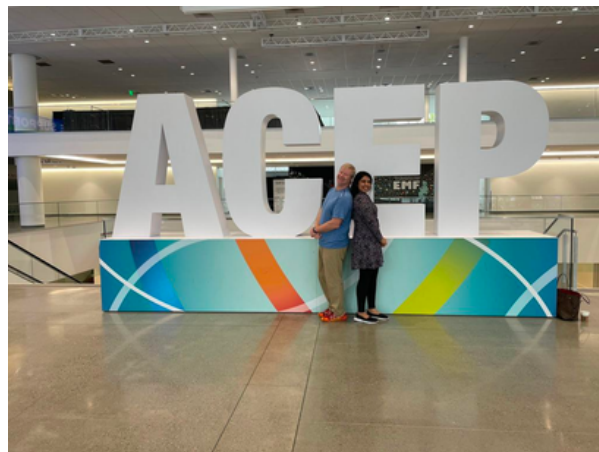
Project Title: Presenting the Peds KetaBan and TAKE-PAUSE Clinical Trial at ACEP Scientific Assembly 2022

Project Location: San Francisco, California

Dates: September 30, 2022, October 5, 2022

Project Description:

During my time at the American College of Emergency Physicians' (ACEP) Scientific Assembly in San Francisco, California, I was invited to present multiple research projects that I have worked on as my time as a senior clinical research associate at Maimonides Medical Center in Brooklyn, New York. I was invited to present the pediatric nebulized ketamine trial and our Vitalis aspirin trial. The clinical studies that I presented were related to the field of pain management in emergent situations, which is a field that I will pursue in my future career as an emergency medicine physician. I am interested in finding low-cost, non-invasive techniques to reduce anxiety and pain in pediatric patients. By presenting at this conference, I can disseminate this research at a global level, bringing recognition to holistic, alternative methodologies to manage pain and anxiety. This impacts me deeply, as an osteopathic medical student, who aims to provide medical care to low-income patients and provide them with non-pharmacologic options to manage their ailments. In low-income countries, their healthcare system is working towards exploring pharmacological options in a cost-effective manner.





Sarah Johnson/Jonan Manzi/Steven Vera (Group Project)

Major: BS Electrical and Computer Engineering

Campus: New York City

Project Title: Storm Station Communication Updates and Repairs

Project Location: San Juan, Puerto Rico

Dates: January 7, 2023 – January 13, 2023

Project Description:

In November 2019, a team from NYIT went to San Juan, Puerto Rico (Comunitariode Capetillo) and built a stormwater station equipped with a water filtration system, two solar panels, and an electric inverter which enabled access to solar energy. In January 2023, the went to the same park and replaced the water collection system and the filtration system which were no longer functioning. We cleaned the gutters which were infested with mold and in anticipation of heavy rain, we added a drainage system that would facilitate underground irrigation. We also added a larger (three ft from the existing water collection system) that would collect excess water from the drainage system which would be used for watering plants. Additionally, the team established remote connection to allow monitoring from anywhere, better locks and cameras for security and consistent meetings with community leaders to ensure they use the system to its fullest potential. Lastly, much of this work supplemented the thesis work of Sarah Johnson.





EDWARD GUILIANO GLOBAL FELLOWSHIPS

Logan Druessel, Adrian Rassing, and Jacob Rodell (Group Project)

Major: DO Osteopathic Medicine

Campus: Jonesboro, Arkansas

Project Title: Exploring the Incidence and Risk Factors of Rhabdomyolysis in Ironman Athletes: A Pre- and Post-Race Study

Project Location: Woodlands, Texas

Dates: April 20, 2023 – April 23, 2023

Project Description:

For our project, each participant completed a pre-race survey including their demographics, past long-distance endurance events, injuries, nutrition, and training regiment. We also had each participant provide a urine sample to allow for a baseline prior to the race. After letting them cool down, we had them complete the post-race survey that included questions about current symptoms like fatigue, cramping, and pain in regions of their body. We also had them give us a urine sample to run the same 10-test urine dipstick analysis as prior to the race.

We have submitted a preliminary abstract to the American Osteopathic Academy of Orthopedics fall conference. We are hoping to present our project at this conference. Once we have completed our full analysis of the data, we will write up our project for publication with the goal of obtaining at least 2 quality papers from this project.





EDWARD GUILIANO GLOBAL FELLOWSHIPS

Winter/Spring 2023

There were 3 Summer/Fall 2021 Fellowships for a total of \$12,735.

Following are updates from those fellows:

Amadeaus Reeves

Major: Computer Science

Campus: New York City

Project Title: Research Design for Virtual Reality Petting Zoo

Project Location: Tulsa and OKC, Oklahoma

Dates: March 18, 2023 – March 26, 2023

Project Description:

My project was Research Design for a Virtual Reality Petting Zoo, where I traveled throughout Northeastern Oklahoma to research first hand sources for the virtual environment that I am creating. One of the most prominent sites for my research was the Wolaroc Museum & Wildlife Preserve. Their wildlife preserve showcased animals native to Oklahoma, such as the white-tailed deer and the nine-banded armadillo. Another stop during my trip was The Tulsa Zoo, which provided important insights for me through their Children’s Petting Zoo. Lastly, my trip included visiting The Joseph H. Williams Tallgrass Prairie Preserve, where I was able to view the countryside unobstructed. Bison are an integral part of the prairie, which is why they are allowed free roam throughout the entire area, allowing me to take close up pictures and videos of the bison grazing. Upon collecting my data, I will be able to develop accurate representation of the natural environment and petting zoo animals to give an optimal experience to those who use the Virtual Reality Petting Zoo.





EDWARD GUILIANO GLOBAL FELLOWSHIPS

Nathanael Rehmeyer

Major: DO Osteopathic Medicine

Campus: Old Westbury

Project Title: Evaluation of Prevalence of Depression in Adolescents with HIV/AIDS in a Rural Clinic in Eswatini

Project Location: Maphiveni, Eswatini

Dates: January 25, 2023 – March 11, 2023

Project Description:

In January 2023, I traveled to Eswatini in southern Africa to work in a clinic which serves a rural, underserved community. At this clinic I conducted research evaluating the prevalence of depression in adolescents with HIV/AIDS using an adapted PHQ2 and PHQ9 translated into Siswati with the help of a local leader. Eswatini has the highest HIV prevalence rate in the world. It also has minimal to no health services and no recognition of the poor health outcomes associated with mental illness. My goal was to begin to assess the impact a positive HIV diagnosis has on the mental health of teenagers, to better equip this clinic to support their adolescents. I surveyed nearly 30 teenagers and had many intense and emotional conversations about mental health sparked by the surveys thought provoking questions. Nathanael experienced a transformative connection with the teenagers of Eswatini. Not only could he analyze newfound data on the connection between an HIV/AIDS diagnosis and mental health, but he saw the firsthand benefits of allowing these teenagers to speak on and share their experiences. His increased understanding of these relationships can and will allow for more impactful programming in transforming the lives of severely underserved communities and societies globally.





EDWARD GUILIANO GLOBAL FELLOWSHIPS

Melody Young

Major: DO Osteopathic Medicine

Campus: Old Westbury

Project Title: Are you Stronger than a Lemur?

Project Location: Durham, North Carolina

Dates: April 4, 2023 - April 19, 2023

Project Description:

This project aimed to understand how grip force in lemurs, a group of animals commonly used as a model system for our earliest primate ancestors, vary as a product of handedness, footedness, phylogeny, age, body size, and ecology. Specifically, my research team (my mentor, post-doctoral fellow and I) built a specialized grip force tester that allows us to collect high-fidelity grip force measurements across a range of species and body sizes. This project utilized lemur populations at the Duke Lemur Center (Durham, NC), which has the largest population of lemurs outside of Madagascar. These data will allow us to test long-standing hypotheses about grasping in primate evolution. Further, we will correlate functional measurements with anatomical specimens to understand the relationship between muscle anatomy and force-generating potential. Additionally, we created an outreach program aimed at teaching school age children (K-12) a bit about anthropology, primatology, muscle physiology, biomechanics, and statistics. We conducted ~10 school visits to local schools and presented our "Are You Stronger Than a Lemur" outreach program with very positive feedback. The program was interactive and engaging and we demonstrated increased knowledge between pre/post the program, as well as collected the first ever ontogenetic grip force data in children between the ages of 5-18.

