# **Fred Hoover Memorial Scholarship Recipients**

### 2018

#### **Aitor Bracho**

Aitor Bracho has a deep intellectual curiosity. He reaches for the things that challenge him in order to accomplish as much as he can. Along the way, he has learned that discipline is required, whether it is in becoming an 'A' student at FIU or a practicing mixed martial artist. Aitor discovered that when goals are difficult to achieve, they can still be accomplished through practice, dedication, and effort. He has applied these principles to his love of sports, as well as to tackling demanding classes in physics, math, and science. With this scholarship, Aitor will be able to continue his pursuit of a doctorate in physics, while remaining strong and healthy. Understanding how the universe around us works is Aitor's dream come true.

# **Antonio Martinez Margolles**

Antonio Martinez was first introduced to – as he would say – "the beauty and simplicity of physics" as a child, thanks to the unique fact that his father was also a physicist. Throughout high school, math and science were his favorite subjects, and he was intrigued by how things worked in chemistry and biology. At first, he actually wasn't sure about this thing called physics. What do physicists do? And why did they do it? So he started asking his professors questions – a lot of questions. Eventually, through his research on nanobiotechnology, he came to understand the importance of physics to the world and what it meant to him personally. In fact, he became so interested in physics that he now plans to pursue a graduate degree in the field.

# 2017

#### Francesco Sessa

Francesco Sessa has amassed an impressive academic record of 3.82 out of a possible 4.0 toward his double major in Physics and Mathematics. He has taken the most demanding physics courses (which include some of the most demanding courses in the whole university) and simultaneously has gained valuable research experience by serving as a volunteer research assistant.

In this day and age, it is no surprise that Francesco discovered his love for physics from exploring and watching YouTube physics videos! He was immediately enthralled by discussions of String Theory, worm holes and other subjects, and found these ideas fascinating to think about as he went through his day, so much so that he soon realized he wanted to pursue the study of physics.

But there was one problem. Growing up as a Latino immigrant in a low-income household with a history of abuse did not lend itself well to the possibility of higher education. He thought it

was unlikely in fact that he would ever be able to pursue his dream, especially as looking out for his mother and trying to put food on the table were two bigger issues that were front and center in his mind. Fortunately, the timing was right for Francesco, and the policy known as DACA (Deferred Action for Childhood Arrival) opened many doors for him to attend college. Despite all of his hardships, Francesco surmounted them and aimed toward a brighter future through physics.

Still, it wasn't easy. Francesco realized, as he put it himself, "physics was not for the faint of heart." There were few who had faith in his ability to accomplish this idea of a career in physics. He and his mother also had to leave their dangerous environment. But thanks to some financial support, he was able to begin his college education. At first, he worked two jobs while earning his Associates degree with high honors at Broward College. From there, he enrolled into the BS in Physics program at FIU where he found many supportive peers and professors that helped him adjust to his new challenges and difficulties. The rest is history as he became a Dean's List student for every semester since being at FIU.

Francesco is an active participant in physics' student affairs, participating in outreach activities and presenting talks on his favorite subject. He has served as Treasurer for the FIU Society of Physics Students and for Sigma Pi Sigma, the Physics Honors Society. He also co-founded and became Treasurer for Women in Physics and Astronomy. Francesco has worked in the department as a Learning Assistant for Introductory Physics.

The faculty write well of his efforts, especially as he has been able to accomplish his impressive record even under strong hardship. It is for all these reasons that Francesco was chosen for the Fred Hoover Memorial Endowment award. Fascinated by the life of researchers, he hopes to continue learning and making new advances in his field of study. Today, Francesco's main research interest has focused on producing and examining carbon nanotubes to find the optical conditions for carbon nanotubes on a steel substrate. He plans to continue with his education by pursuing a Ph.D. in Physics.

# 2016

#### **Thomas Hentschel**

Thomas Hentschel is a native of Miami and is finishing his junior year at FIU. He is a Dean's List student and a STEM (Science, Technology, Engineering, and Mathematics) scholar majoring in Physics, with minors in Mathematics and Computer Science. He has worked with an optical physics group at FIU to study the interactions of light and matter, and is currently doing research with the nuclear physics group to study the interactions of atomic nuclei. Additionally, Thomas is a member of Sigma Pi Sigma and the Society of Physics Students clubs. Outside of academics, he volunteers for a food pantry serving the poor and enjoys playing hockey.

# 2015

# **Asais Uzcategui**

Asais "Camila" Uzcategui is originally from Venezuela, but has spent most of her life in South Florida. Asais is a Dean's list student and McNair Fellow, who is double majoring in Physics and Anthropology. Her research interests lie in the field of biological physics research, in an aim to more clearly understand the overtly consequential relationship between fundamental physical laws, and complex biological phenomena. She hopes to one day receive a Ph.D. in biophysics, and ultimately work in the global health industry through biophysical research. During her time at FIU, Asais was the founding president of the FIU chapter of GlobeMed. Since their founding they have helped their partner organization, Escuela de la Calle (EDELAC) in Guatemala, establish a community health clinic, and a clean water project. She is also an active member of the Society of Physics Students, and a student researcher in The Theoretical Biophysics Group at FIU. Asais hopes to further employ the skills she has learned doing a molecular physics Research Experience for Undergraduates at SRI international in Menlo Park, California over the summer. In her spear time she enjoys reading, volunteering, and spending time with family and friends.

# 2014

# Farid I. Salazar Wong

Farid is an international student from Lima, Peru, double majoring in Physics and Mathematics. He is an Honors College invitee and Dean's list junior student. Intending to apply to Physics graduate school and develop extensive research in Mathematical Physics, he believes that higher level science plays an important role in cutting edge technology and the understanding of our surroundings. He is part of the Learning Assistant Program at FIU, helping students in both lower and upper level courses. In his spare time, he usually plays guitar and actively participates in a parish community group.