FALL 2022 | EWB-USA WPI | EL CISNE DE CONCHAN, ECUADOR

# **TECH TAKES ON** THE CHALLENGE





#### **WORKING HARD**

By Mya Darrow & Ella Devault

Fall 2022 was busy for Engineers Without Borders WPI! Between carrying out prototype testing, communicating with the community and EWB offices about our remote implementation, planning for fundraisers, and electing our next executive board, there was never a dull week. We are proud of what we accomplished this semester, and are so excited to see what the next semester brings!

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### TECH BIOSAND FILTER PROTOTYPE TESTING & REMOTE IMPLEMENTATION



This Fall, EWB continued on our work with the biosand filtration systems. Over the summer, Project Team began report writing and planning for a remote implementation, set to occur in early 2023. We are excited to see our club's second remote implementation in El Cisne de Conchan, Eduador through and receive the community's feedback following the pilot phase.

Led by Tech Lead, Gabe Espinosa, our members were kept busy at weekly tech meetings! Minor prototype changes were made to the biosand filters including the size of the holes in the diffuser plate, and a PVC-T to the end of the outlet pipe to better direct the water into the output bucket. Throughout A-term, we also conducted testing on our filter prototype by collecting water from Institute Pond everyday and running it through the filter to form its biolayer. Throughout this process, coliform tests were taken on both the input and output water, yielding great results!

#### **PROJECT TEAM**

**Project Lead:** Ella Devault

**Co-PMEL Chairs:** Ndenda Mutsaku Fierro & Abigail Holmes

> **Technical Lead:** Gabriel Espinosa

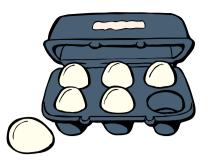
> > **Treasurer:** Jack Periello







## **EGG CAR CHALLENGE** GBM COMPETITION









This B term, we challenged WPI students to use their engineering skills to create the best egg car. Students were given two dowels, two straws, four wheels, some tape, and a piece of cardboard. Additional items could be obtained as well, such as a sponge, but at a cost.

The goal was to make a car that would keep an egg intact when pushed down a ramp. Each team's egg car was judged on four categories by a panel of student judges: design/creativity, speed, the integrity of the egg, and budget efficiency. First place received a legendary Ultrafan, and second and third place received Superfans. We were amazed to see the amazing creativity from all the people who participated!

### **COOKIES WITHOUT BORDERS** B-Term Fundraiser

This year, we sold homemade cookies for our first-ever Cookies Without Borders fundraiser! Led by Events Coordinator, Jane Curtis, for our Fall fundraiser, members mixed, rolled, baked, and sold over 350 cookies, raising a total of over \$500 to go towards our club and project! These cookies were delivered right to our WPI students and staff on December 13th as a nice treat on Wellness Day! Thank you to everyone who supported EWB by buying cookies or donating!



### 2021-22 EXEC BOARD



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#### **CONTACT US!**

Exec email: ewb-execs@wpi.edu | Website: http://ewb.wpi.edu/#/ Instagram: @ewbusa\_wpi