

Sensor Team



Bottom row left to right: Rachel Valek and Maren Johnston Middle row left to right: Benjamin Arnesen and Spencer Parker



Kepa Zubeldia

S E N C I C O C L I E N T S

PROINPA CLIENTS



Alejandro Bonefacio: Is the head researcher at Proinpa. Studies Quinoa primarily and potatoes and llamas secondly. Interested in sensor to look at the pollution in his community. He is willing to purchase the sensor.



Pablo: Researcher at Sencico who tests cook stoves. He is one of contacts for the cookstove sensors in Peru. Sadly do not have a picture of Pablo because we did not go to Peru.

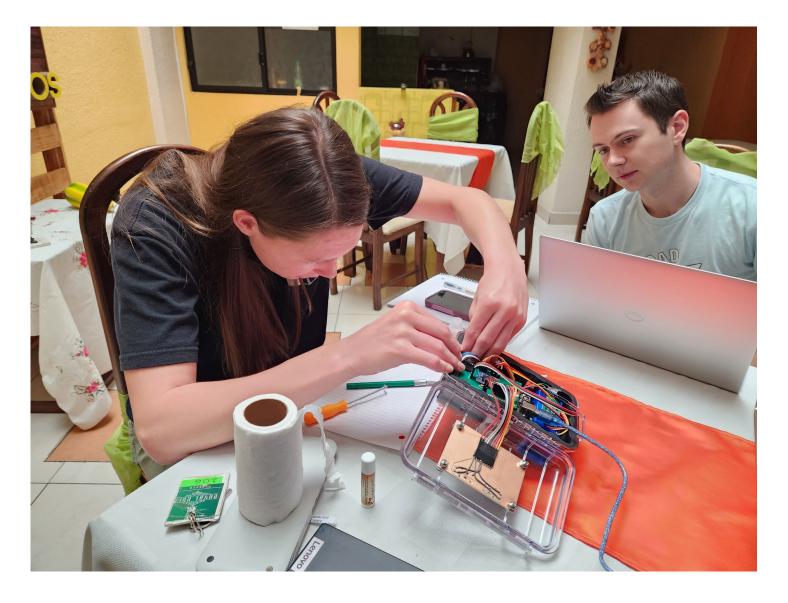
Maria: Researcher at Sencico who tests cook stoves. She is one of contacts for the cookstove sensors in Peru.

Sadly do not have a picture of Maria because we did not go to Peru.

Miriam Alcon: A researcher at Proinpa. •
She is very interested in the sensor to look at cigarette smoke pollution.
Would likely use the sensor purchased by Alejandro for further research in air pollution. This research is mainly out of curiosity.



The night before showing the sensor to Alejandro and Miriam an electrical component within the sensor box snapped. This is our excitement at 1 am when we were able to fix the box.



This is Maren and Spencer working on ensuring all components of the box are secure after traveling.



This is Miriam showing us the way to her friends Flora's house where would test our sensor.



This is Flora's house where we took the sensor box to be tested during cooking hours. There was no chimney at this house. The ventilation was a crack between the roof and the outside wall the roof attached to.



After testing the sensor, we found that there were some issues with the CO sensor. This is use explaining our plight to Terri.

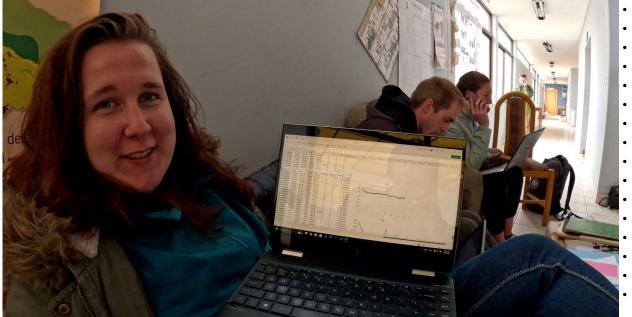
This is us working with Randy to try and figure out the sensor issues.

Specifically with the CO sensor. He gave some great insight to further test the sensor by walking around outside where the CO should theoretically be 0.



This is us showing Randy the data he asked us to collect by walking around the building outside. c

This is the sensor team further analyzing the CO data with Maren and Spencer calling the CO manufacturing company for answers.





This is Maren ensuring that the CO sensor is properly secured and screwed in. We found that one of the screws had popped out and the CO sensor had loose connections which likely led to the weird data results.



This is Maren continuing to work on the box to secure all of the pieces.

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Ben is pointing out some key components in the data.

Spencer and Ben are discussing how the CO2 data sheet indicates that the CO2 sensor should be able to calibrate itself.





Maren is showing how small the CO sensor screws are.



Rachel is holding the CO sensor in place while Maren finishes double nutting the bolt to prevent the screws from loosening in the future.



Maren and Spencer working on the box.



Spencer interviewing Alejandro and Miriam about the sensor box and what they would like from the box.