

## Baoling Yang



## Project Breathe

**Project Description**

This project is about an emergency call device for people in the wild. As a young people curious about the world, especially our friends like to travel around in a team, especially to the mountains and fields with few people there. When we make explorations in the wild, how do we make sure our safety? It is absolutely important that we don't get lost. Therefore, we need a GPS tracker to help us find the way home. Moreover, if someone goes away from the team and get into danger, he or she might be able to call their teammates to get help, thus we need a communication device.

In fact, this device can not only be used in the wild, it can also be used by fire fighters or other disaster relief personnel. With this device, disaster relief personnel is able to get connected with each other even when the phone signal is poor. And with the GPS tracker, they will quickly find their way to safety.

**Concept Description**

In the process of conceptual design, many ideas came to my mind. The first one is a watch, but I found it inconvenient to put your hand to the mouth in order to make a call. The second one is a headset, but when tested, it doesn't fit every one's head and may fall off the head easily. The third one is a earphone with a microphone and a string connected to a collar. A string connects to the earphone and prevent the earphone falling off. However, some students found the string very annoying.

The final version is only an earphone. Therefore, one earphone to receive location information and make phone call. But phone signal is poor in the wild. So I make it a two way radio which is widely used by explorers in the wild, even in antarctic region. One big button for SOS call is fit on the surface which makes it easy to push so that when people get into danger, they will easily make a call. However, in order to avoid misoperation, the button should be pushed twice to make a call. Receivers can talk to them through the microphone.

