The early symptoms of COVID-19 indicate impairments in the normal functioning of the respiratory system. Does this alter the acoustic characteristics of breathe, cough, and speech sounds? This is an open question waiting for scientific insights.

A COVID-19 diagnosis methodology based on acoustic signal analysis, if successful, can provide a remote, scalable, and cost-effective approach for screening (or testing) individuals. This can supplement the existing molecular COVID-19 testing methods, such as RT-PCR and RAT.

The Second DiCOVA Challenge is designed to encourage a scientific and engineering exploration into COVID-19 diagnosis using acoustics.

Highlights:
- Participants will be provided with an audio dataset composed of breathing, cough, and speech sound samples collected from individuals with and without COVID-19.
- Participants will be required to build machine learning models for classifying COVID subjects from non-COVIDs.
- Participants will evaluate model performance on a blind test set and compete on a leaderboard.

The challenge timeline is set to encourage submission of findings to the International Conference on Speech Acoustics Signal Processing (ICASSP) 2022 (https://2022.ieeeicassp.org/)

The Second DiCOVA Challenge
Diagnosing COVID-19 using Acoustics
Aug 11 - Sep 24, 2021

Event Date
Registration Opens
August 11, 2021

Website
https://dicovachallenge.github.io/

Contact Us
dicova.challenge@gmail.com

Organizers
Sriram Ganapathy, IISc Bangalore
Prasanta K. Ghosh, IISc Bangalore
Neeraj Sharma, IISc Bangalore
Srikanth Raj Ch., IISc Bangalore

The event focuses on the early symptoms of COVID-19 and explores whether these symptoms alter the acoustic characteristics of sounds such as breathing, coughing, and speech. A successful methodology could provide a remote and cost-effective way to diagnose COVID-19, supplementing existing tests like RT-PCR and RAT.

The challenge includes providing participants with a dataset of audio recordings from individuals with and without COVID-19. Participants will develop machine learning models to classify COVID subjects from non-COVIDs and evaluate their models on a blind test set.

The timeline for the challenge includes:
- Development Data Release: Aug 16th
- Evaluation Begins: Aug 30th
- Evaluation Ends: Sep 24th
- ICASSP Paper Submission: Oct 1st

The challenge is designed to encourage submission of findings to the International Conference on Speech Acoustics Signal Processing (ICASSP) 2022.