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Progress Report
Received from: Hiran Selvadurai and Carla Rowe

GRANT: THE CYSTIC FIBROSIS METABOLIC MONITORING GRANT 2021 (sponsored by COSMED)
Project Title: "The road map to personalised diet management in children with CF"

We had a training sessions organised by Cosmed in July 2022. The device had a calibration issue which required the device to be taken away and checked and was returned to us with another training update. Given that we are still in COVID times, we needed to obtain the necessary approvals from the Infection Control team about cleaning and disinfection. The team recommended several strategies that we implemented. We had all the parts and equipment ready middle of September 2022. Unfortunately, these unavoidable issues delayed the start time of our project.

Our study was initially designed using Vyntus® CPX – Canopy Dilution Method to measure resting energy expenditure and substrate utilization at rest. This device required access to the respiratory laboratory and trained lab staff which was limited during the COVID-19 pandemic. However, since having the option to use the COSMED metabolic monitoring device, it has allowed for an increased number of participants to be recruited into our study. The COSMED system has allowed us to test our inpatients on the ward in single rooms. This machine can also be used by non lab staff, and I have been running all the tests myself on the ward. Since starting the study we have been able to complete a number of tests using the COSMED device and have been able to recruit several more patients to our study. To date, we have found the portable COSMED device very user friendly and time efficient.

We have access to the COSMED Device for 18 months and we aim to continue to recruit as many patients with CF as we can to our study. We anticipate that we would have completed our study in this time frame and will present our results at the next Australian CF meeting. We are also collaborating with PICU and oncology as they are very interested in the functionality of the device and would like to implement our protocols to their patient groups.