

Executive Summary



Rohit Srivastava, FNASc, FRSC, FRSB, FNAE, FAMS
Himanshu Patel Chair Professor
Department of Biosciences and Bioengineering
IIT Bombay, Powai, Mumbai 400076
Email: rsrivasta@iitb.ac.in
Ph: 9867980408

1. Title of the Project: Design and development of Uterine Contraction Assessment and Cervical Screening devices through platform technologies
2. Date of Start of the Project: February 1, 2020 to January 31, 2023

3. Aims and Objectives:

Year 1: Conceptualize and build proof of principle for proposed technologies

(Done)

Year 2: Design and develop proof of concept with prototypes and early studies, evidence

(Done)

Year 3: Design for manufacturing, build prototypes and commercialize the technology

(Progress)

4. Significant achievements (not more than 500 words to include List of patents, publications, prototype, deployment etc)

Publication:

Pathak, Shantanu, A. Kulkarni, Ameya P. Bondre, Prince Nadar, Rohit Srivastava, A. Joshi and Anjana Donakonda. "Fetosense and U- Act: Novel Solutions for Monitoring Fetal Heart Rate and Uterine Activity to Reduce Neonatal Morbidity and Mortality." (2019)

(https://elibrary.worldbank.org/doi/10.1596/978-1-4648-1484-6_ch1)

Patent: Will be filed when we have the final prototype

Prototype: Next page



UAct



UCan

5. Concluding remarks

- Prototype and product development is going on as per planned, design for manufacturing and prototype will be ready by June 2023
- Pandemic created difficulties for studies with medical colleges and hence further product development is also affected, hence decided to transfer the technology and jointly with industry scale the project.
- Final design and prototype for manufacturing ready by Dec 2023
- Transfer the technology for clinical validation studies and commercialization by Dec 2024