

IITH-incubated Startup develops 'Gamified Arm Rehabilitation Device' for stroke victims

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BeAble Health works towards enabling health and lives through the convergence of good design and technology



Indian Institute of Technology Hyderabad-incubated startup BeAble Health has developed a Gamified Arm Rehabilitation Device for neuro-rehabilitation of stroke victims and motor rehabilitation of victims with the upper motor deficit.

The 'ArmAble' was unveiled by Dr. Rajiv Kumar, Vice Chairman, NITI Aayog, in the presence of Dr. Renu Swarup, Secretary, Department of Biotechnology, during Seventh Foundation Day celebrations of Biotechnology Industry Research Assistance Council (BIRAC) on 19thMarch 2019 at Delhi.

During the Foundation Day, 'BIRAC TiE WINER Award 2019 for Women' was presented to Akitha Kolloju, Co-founder of HEAMAC Healthcare, which was also incubated by IIT Hyderabad. The founders of both startups graduated from the Fellowship Program offered by the Center for Healthcare Entrepreneurship (CfHE), IIT Hyderabad, which trains individuals from various disciplines towards innovations in Healthcare.

Speaking about the recognitions accorded to graduates of CfHE Program, Dr. Renu John, Co-Head of CfHE and Head, Department of Biomedical Engineering, IIT Hyderabad, said, "The successes of these two entrepreneurs is a testimonial to the Systematic Biodesign Process that they followed at the CfHE starting from the identification of the unmet need to the Launch of the product validating their concept and carefully addressing the risks at each stage of product development"

BeAble Health works towards enabling health and lives through the convergence of good design and technology. 'ArmAble' is their first product and is aimed at solving a pressing need for intensive, engaging and regular rehabilitation therapy for Upper Limb. It is aimed at conditions such as Cerebral Palsy, Multiple Sclerosis, Traumatic Brain Injury, Fracture and Frozen shoulder. The key features of 'ArmAble' device include:

- Ø Affordable
- Ø Engaging Game Based Therapy
- Ø Higher Repetitions and Intensity
- Ø Data based quantified progress and recovery
- Ø Full ROM for the Arms
- Ø Tele-Rehabilitation

Speaking about 'ArmAble', Habib Ali, a Biomedical Engineer and a CfHE Fellow who co-founded BeAble, said, "The constant mentoring and support by CfHE helped us identify a strong need and conceptualize an appropriate solution. This strong research foundation and a significant grant from BIRAC under the guidance of IKP Hyderabad have accelerated our journey to the product. The ecosystem enablers have played a crucial role in our journey so far, and it is just the beginning."

BIRAC-TIE WINER Award

Akitha Kolloju, who co-founded Heamac Healthcare Pvt. Ltd along with Mr. Prasad Muddam, is developing a 'Smart Phototherapy System for Neonatal Jaundice,' which promotes an uninterrupted treatment while breastfeeding and Kangaroo Mother care.

Accepting the award, Akitha Kolloju said, "The Grant will boost our efforts to increase the efficiency of treatment and reduce neonatal mortality rate due to severe jaundice. Nearly 13 million infants per year globally are unable to process bilirubin quickly enough and require jaundice treatment to prevent death or lifelong disability. Even though the cure is simple and this condition preventable, existing solutions are unable to address jaundice of different severities resulting in extended therapy time and morbidity. HEAMAC Healthcare has developed a device that provides graded phototherapy so that babies suffering from physiological jaundice get sufficient illumination."

Both the founders of HEAMAC are from the second batch of CfHE Fellows and were involved in lengthy clinical immersions over several months at leading hospitals to assess the unmet needs in the medical fraternity.

As a part of this event, BeAble Health was selected to unveil its product 'ArmAble', which has been supported by BIRAC under the BIG Scheme. The product was unveiled in the presence of Dr. Mohd. Aslam, Managing Director of BIRAC, Dr. Ted Bianco, former Director, Wellcome Trust U.K., Dr. Manish Diwan, Head (SPED), BIRAC, Dr. PKS Sarma, Head (Technical) BIRAC.