

nLite360° to heal neonatal Jaundice by HeaMac

Our journey of entrepreneurship started at CfHE, IIT Hyderabad through the Bio-Design Fellowship, which is a DST recognised innovation centre providing mentors and support for R &D. It is a one year program which brings entrepreneurs, engineers, clinicals and the business community on a single platform. During this fellowship, we have undergone intense clinical immersion and have understood the healthcare needs of the present-day society.

The team completed 1 year of healthcare entrepreneurship fellowship that includes clinical immersion, need identification and validation through a well-established Bio Design process at IIT Hyderabad in Government and private set-ups in India. Both the founders of Heamac had an affinity towards the neonatal needs. We spent around three months on finding out needs in neonatal and maternal care, after finding out problems from our observations we had identified our need area as neonatal jaundice management and worked on a system which suits both government and private setups. We spent 350 hours in focused immersion and worked for three months on building over 50 concept explorations. This was funnelled out to one viable concept that has been developed into a demonstrative proof of concept.

Because of the incubation at CfHE our initial journey of entrepreneurship was smooth. The fellowship program helped us to see and understand the clinical needs of ourselves. We were able to meet the doctors and clinicians in person. During this program, we understood that there is a need for a dynamic device to treat neonatal jaundice and have developed the product nLite 360.

Heamac is co-founded by Prasad Muddam, an Industrial Designer and Mechanical Engineer

with 10 years of experience working with the neonatal field designing and developing medical devices right from prototyping to marketable products and Akitha Kolloju, Biomedical Engineer with a masters degree and hands-on experience in biomedical product prototyping.

Our product “nLite-360” is a smart and modular Phototherapy device which provides graded phototherapy for jaundice newborns. We are developing a solution which is suitable for the NICU settings and the resource-constrained settings. It provides efficient treatment at reduced power intake and in reduced time. It also provides continuous treatment to the baby even during breastfeeding and Kangaroo Mother Care.



World's 1st INTELLIGENT Phototherapy System

Intelligent Therapy



Provides customized therapy as per the risk level

Portable



Battery pack enables Home therapy

Embraceable



Promote Kangaroo care & Breastfeeding



Figure 5: Brief about nLite360°

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We have our manufacturing and distributing partners, Nice Neotech Medical Systems, from Chennai. We have received the funding support from BIRAC through the BIG Birac Call. We have the mentoring support from IKP Knowledge Park who is our BIG Partner. We have clinical partners from Kamineni MNR and Neloupher Hospitals.

Some of the notable achievements we received throughout our journey of entrepreneurship like:

- BIG Birac Grant. Birac Women In Entrepreneurial and Research (WInER) award.
- Best early-stage startup award at IKMC 2020 organized by IKP. Winners at the Healthcare summit 2020.
- DMA award in the Healthcare sector. Winner of the 3M Young Innovators Challenge
- One of the top 5 nominees of the Lexus Design award
- We are one of the top 5 finalists of the DivHERSity awards.
- We are in the Top 5 of the BioAsia 2020 finalists.

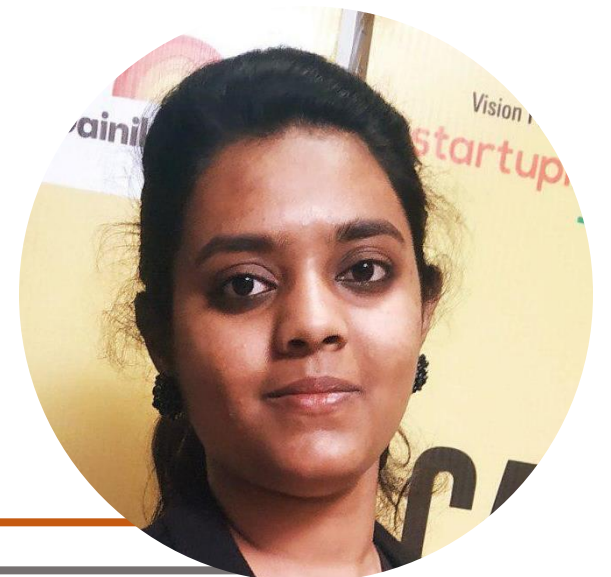


Figure 5: Team HeaMac during field exploration, understanding the problem Statement



Figure 5: Team HeaMac from their Workstation at CfHE, IIT Hyderabad

Ms. Akitha Kolloju
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