

# Come on Baby!

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THE Port Hackathon 2015

CERN & Campus Biotech

# The Team



# Pia's car (inside view)





“Every year  
1,000,000 children die  
on the first day of their life”

*Save the Children*

“99% of new-born deaths  
occur in the developing world”

*World Health Organisation*







#### THE INSTRUCTION TO THE OPERATION

1. Start the machine  
Turn on the power switch, after the buzzer sounds, set the "Rise" sound, the incubator's controller enters the self-checking state. First, the incubator will enter normal state.
2. Set up the air temp  
Press the "Air" button, remove the heating of the setting up, under this mode, the indicator used for setting up is yellow. According to the need, press the "Increase" button or the "Decrease" button in order to set. When the yellow up indicator is from glowing to non-glowing, it means normal control state.
3. Deal with the alarm  
If present the abnormal situation in the incubator, the alarm will sound, the controller will identify and give out sound and light automatically, press alarm release button, the alarm will be closed, if not, the alarm will be closed and release it. Then the instrument will resume to normal condition automatically.

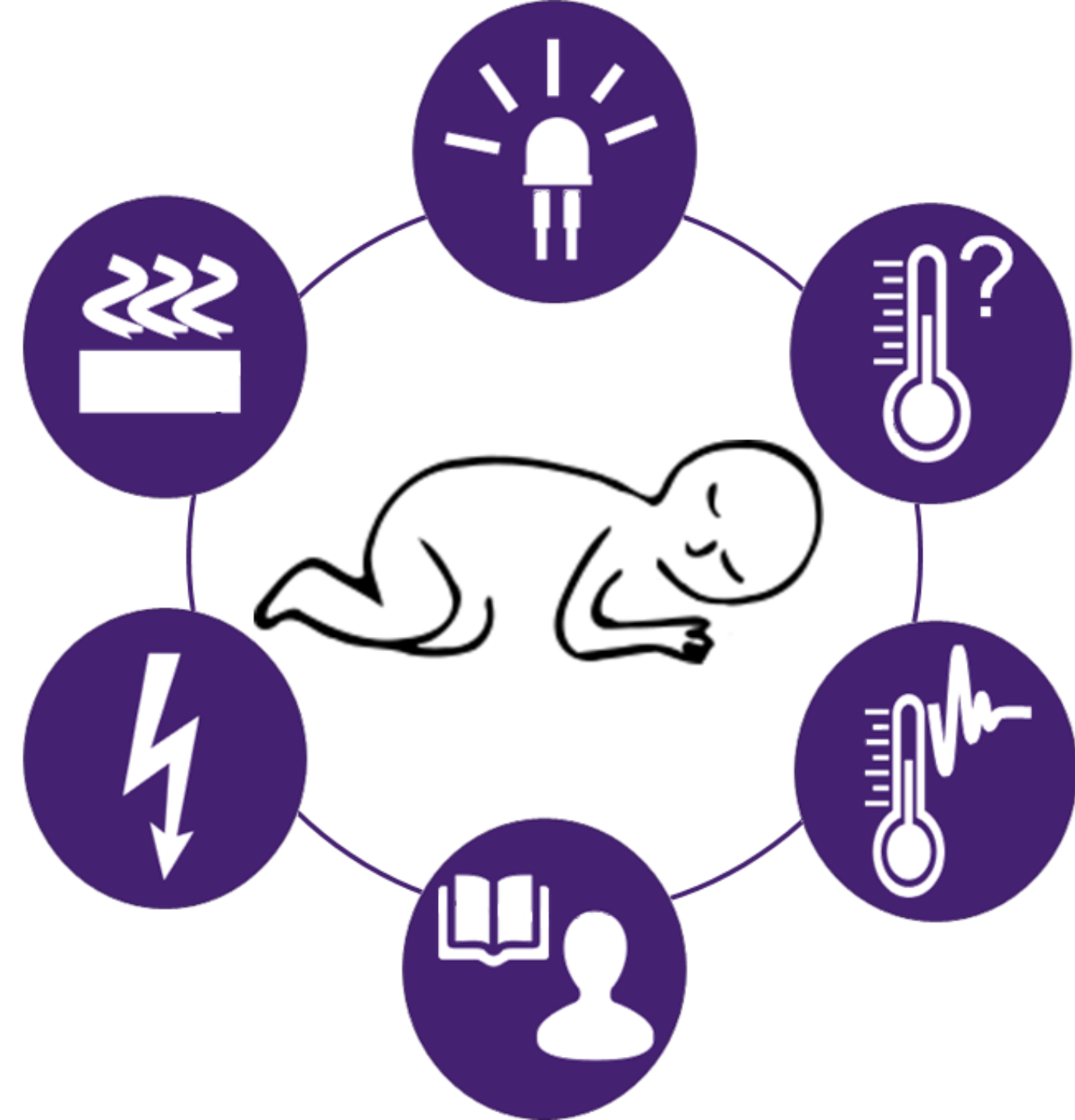
#### NEONATAL INCUBATOR

AIR TEMP 37.0 °C  
TEMP SET 37.0 °C

HEATER POWER  
FAN

#### PRECAUTIONS

1. When start machine, carefully before using the machine, the heating start, set the incubator must be checked, and set up the guidance of the machine's operation.
2. The incubator should be put in the clean, dry, and well-ventilated place, and avoid having a change wheel, oil, and keep out of the machine's way for the baby.
3. After using the machine, must set up the incubator's temperature, set the "Air" mode the need, stop working in the mode of "Air".
4. This machine is not for use, please "Air" mode, in the mode, set to mean that the upper limit of the temperature, please set the temperature in the mode of "Air".
5. Must use the device that is clean, dry, and well-ventilated, and avoid the machine's operation.
6. Please keep the machine's operation in the mode of "Air".
7. Please set the machine's operation in the mode of "Air".
8. When a certain function of the equipment is not working, please stop using the machine, and set the machine's operation in the mode of "Air".
9. Please set the machine's operation in the mode of "Air".



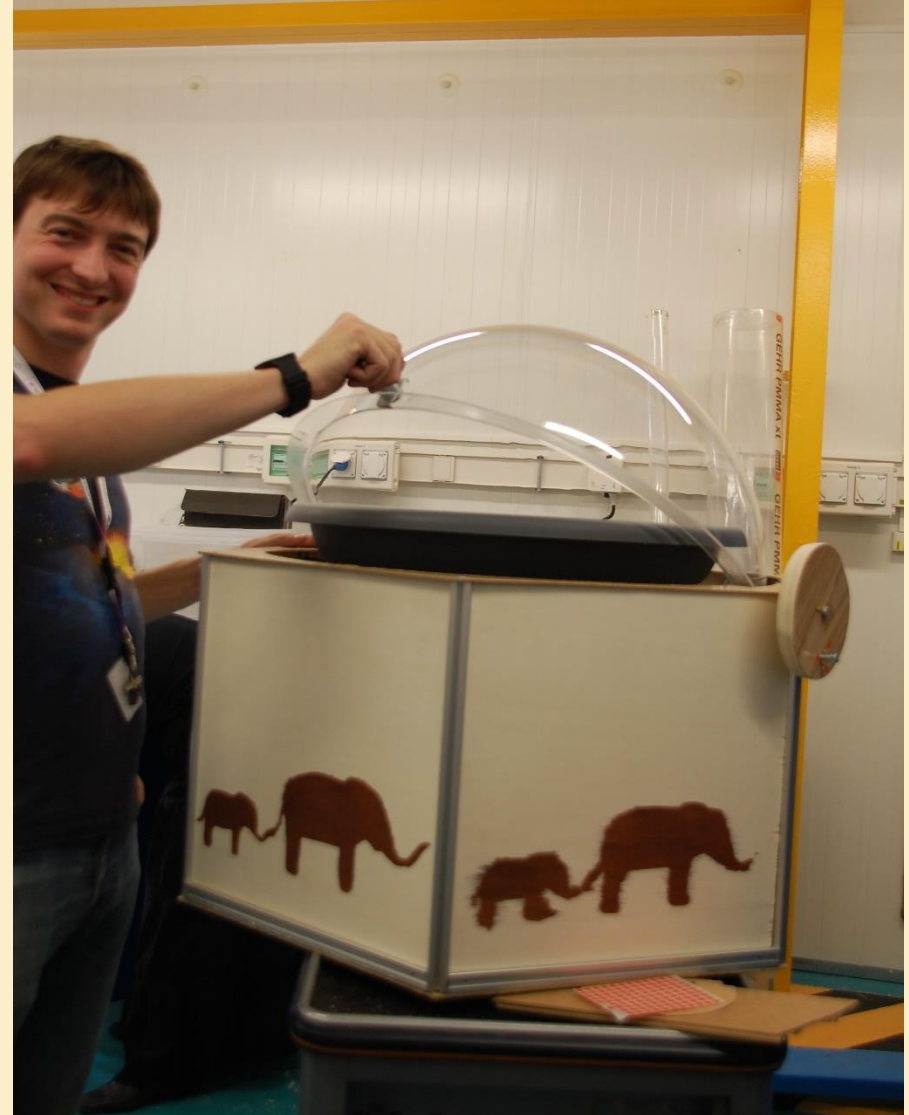
Low cost  
Low energy consumption  
Long lasting

Trustworthy  
High tech  
Intuitive to use/clean

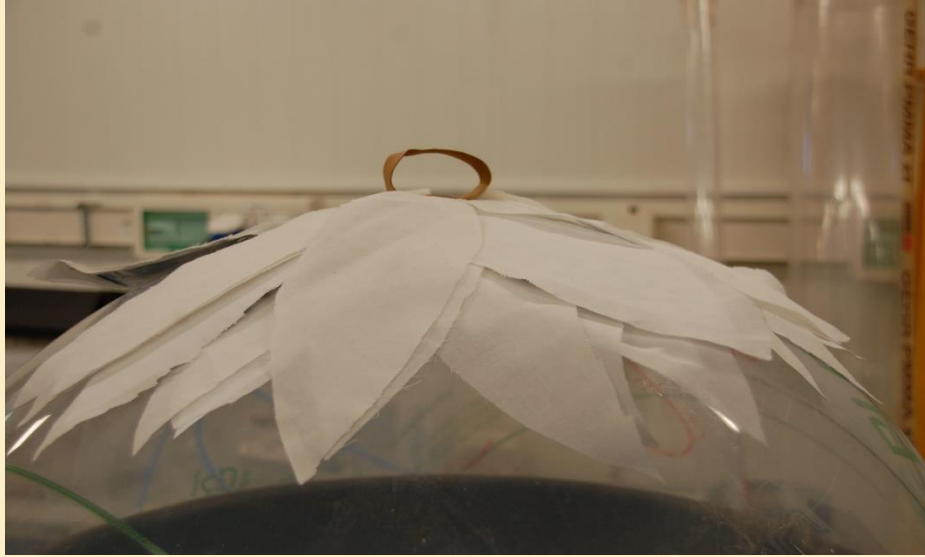




# New Design



# Hood: Cover, Stimulate & Reflect



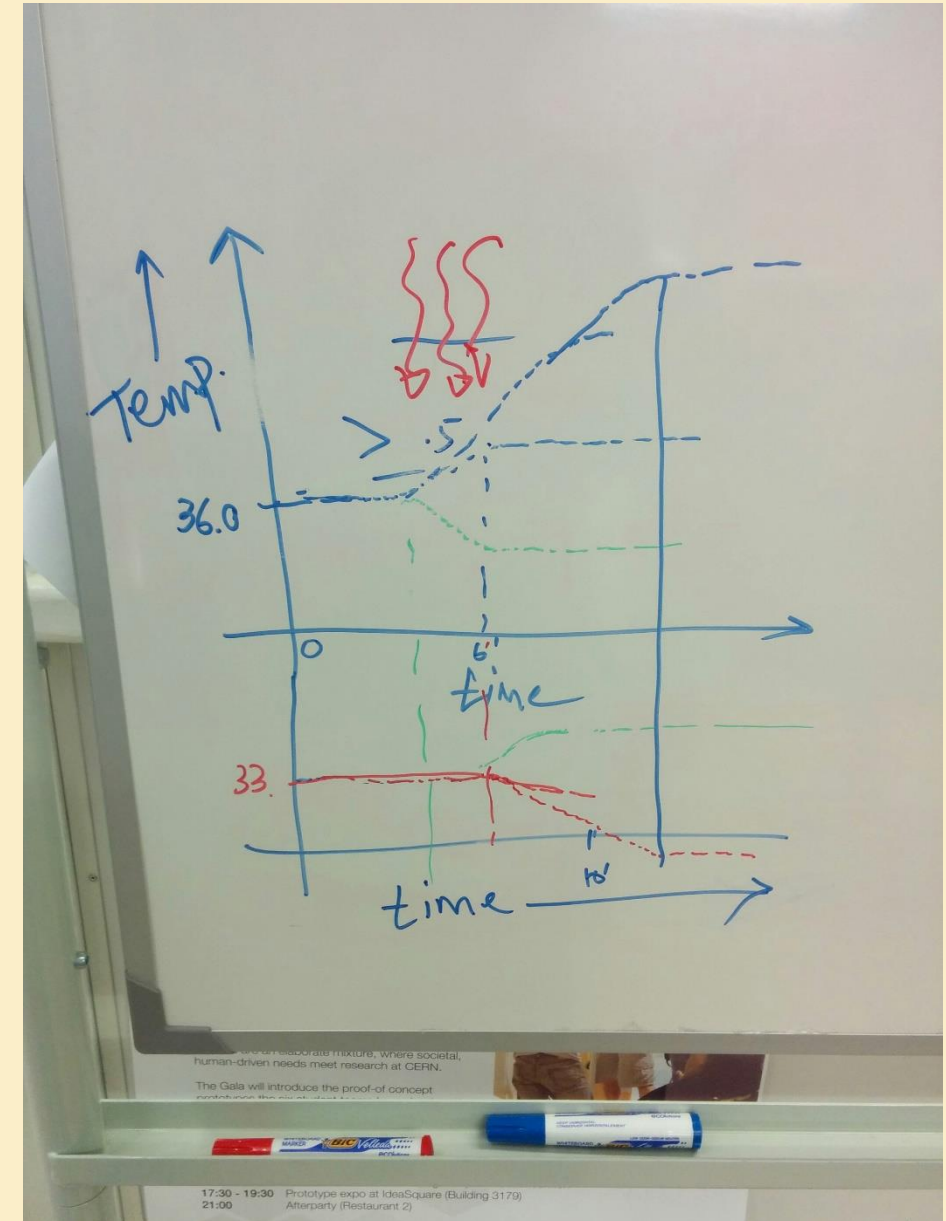


# Temperature Regulation

6 temperature probes  
2 probes on trunk  
2 probes on the feet  
1 inside and 1 outside the incubator

Measurement of rate of change of the difference between trunk and feet for early detection deterioration

Aim: keep the baby in its  
ThermoNeutral Zone



# Phototherapy

## Jaundice Treatment





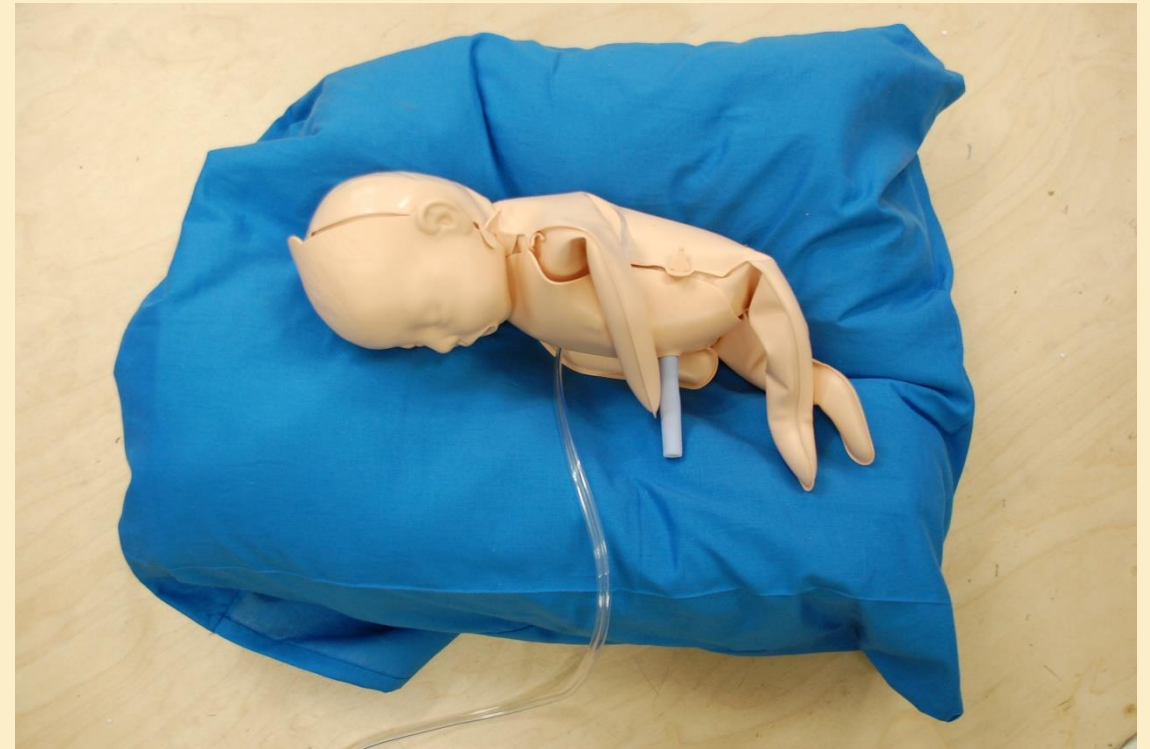
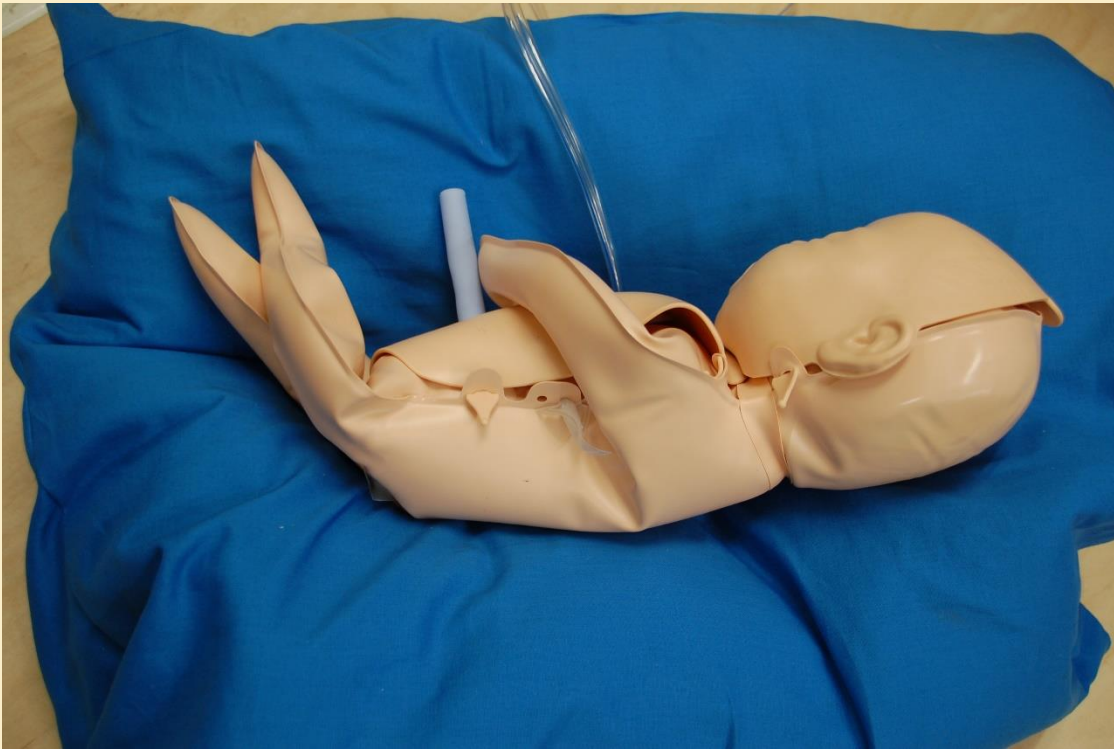
# Phototherapy Umbrella





# Baby Comfort & Body perception

Conductive Matress to keep the warm and help perception of the body



# The journey continues

[globalneonat.org](http://globalneonat.org)

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