

**THE NATIONAL RECONSTRUCTIVE PLASTIC SURGERY AND BURNS CENTER;
KORLE-BU TEACHING HOSPITAL- GHANA**

**List of projects for the BEST fair-March 2017
University of Akron-Biomedical Department**

Projects	Explanation/ Rationale
Innovation of a dispenser for spraying topical dressing creams	The objective is to reduce the pain that is associated with directly smearing creams on burns wounds. It will also help avoid wastage.
An appropriate Blood Pressure (BP) Monitoring system for Burns patients with total body surface area burns	It is very difficult to put the BP measuring calf on the bandaged limbs of an extensive burns patients and get accurate readings
How to place ECG electrodes for continuous monitoring of Vital signs for severely and extensively burnt patient	Bandaging makes it difficult to ensure good and direct contact between the electrodes and the body proper readings
Nutrition/feeding bag with a flow regulator for continuous nasogastric feeding	It takes so much of time and effort to manually push feed regularly through the NG tube.
A Mechanism or simple machine to lift patients in and out of bed easily without much of man power	For convenience for both staff and patients and save time and energy
A simple technology to crush down tablets into powder for NG tube feeding	For convenience for both staff and patients and save time and energy
A Medicine trolley with an incorporated dustbin cabinet and sharp container attached and medication storage cabinets	For convenience for both staff and patients and save time and energy
A bath trolley that will allow burns patients to be rotated, to stand, and sit etc during dressing.	For convenience for both staff and patients and save time and energy
Hospital beds with commodes created in the middle for easy serving of bedpans	For convenience for both staff and patients and save time and energy
A way to prevent pressure ulcer in bedridden patients	Turning of bedridden patients frequently is a challenge due to shortage of staff and huge work demands contributing to pressure ulcers
A way to restrain aggressive/restless patients	The use of bandages to tie and restrain patients is below professional standards
An alarm system attached for patients beds	To make patients getting early attention from nurses
A surgical cap with an absorptive or coolant head band for sweat	Surgeon and theater nurses sweat in the course of surgery and thereby reducing the possible infection.
A way to prevent air bubbles/embolus from entering the IV lines	The current IV line cannula is not air tight and thereby making it easy for air bubbles to be trapped leading to embolism
A technology to monitor flaps	A modern technology to make monitoring of temperature and texture of flaps more easier
A way to file and store patient folders	Due to Lack of better filing and retrieval systems it is difficult keeping patient records
a sticky disposable bed linings for examination trolley	To prevent cross infection from the single use of bedlinnen