



Pro Surg

Portable surgical solutions for remote
locations

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Portable field
equipment's available
in the market



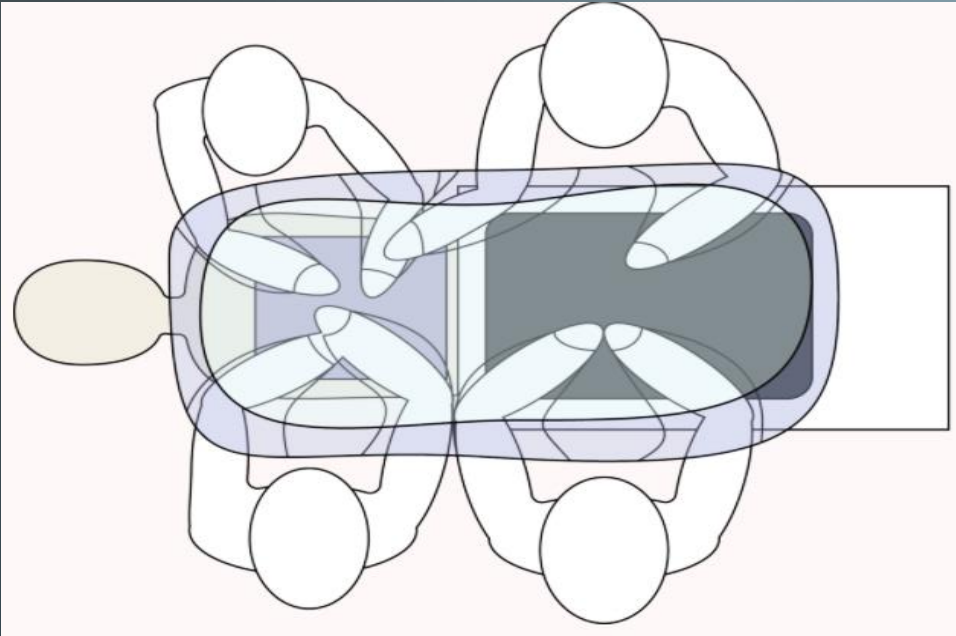


Portable field
equipment's &
emergency medicines



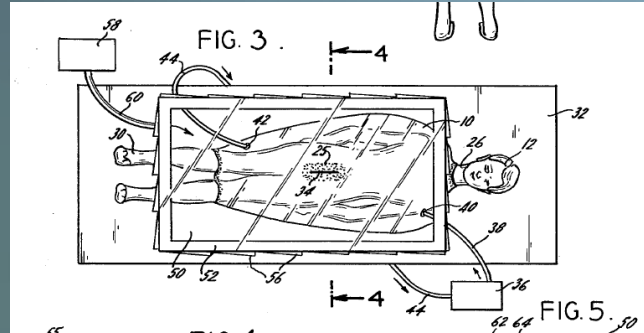
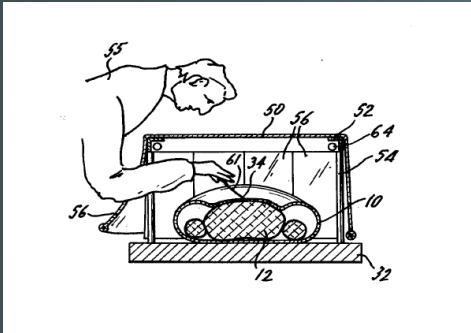
Mobile surgical facilities available

Surgi Box

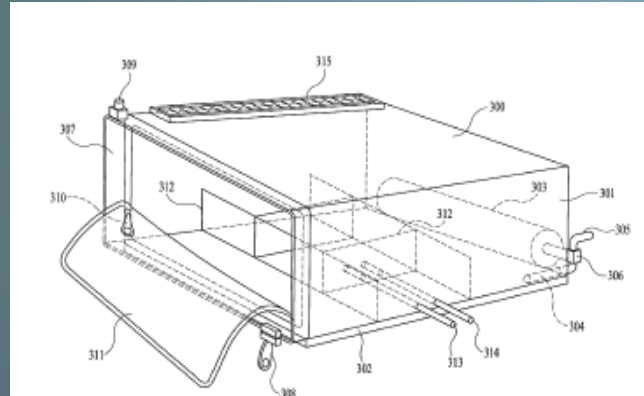
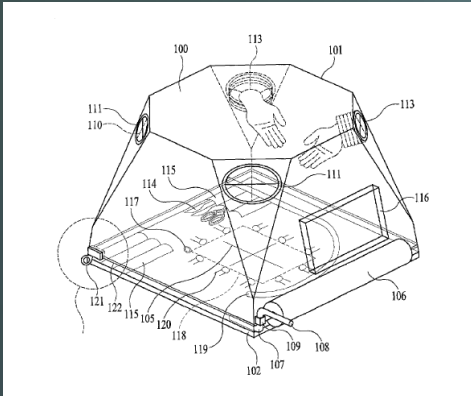


'Surgi box' is the product similar to the context of the project, its an Inflatable enclosure which can be placed over the patient this acts as the sterile space over the patient were the surgical procedure can be done . The surgeon can access the space through the holes provided at the side. The product is under development by MIT.

The main drawback of design would be that the surgeons movement is restricted by the setup. If blood or other fluid splashes on to the enclosure the surgeons vision will be obstructed. The placement of surgical instruments and accessing it would be another issue.

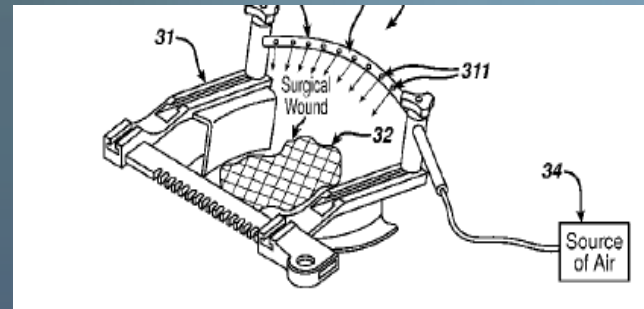
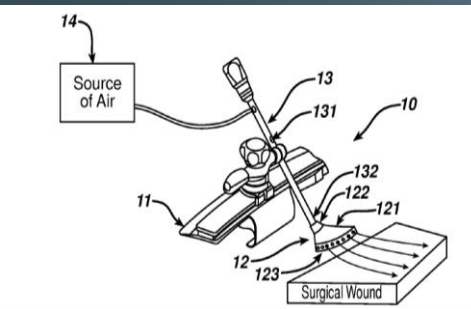


Patient search details

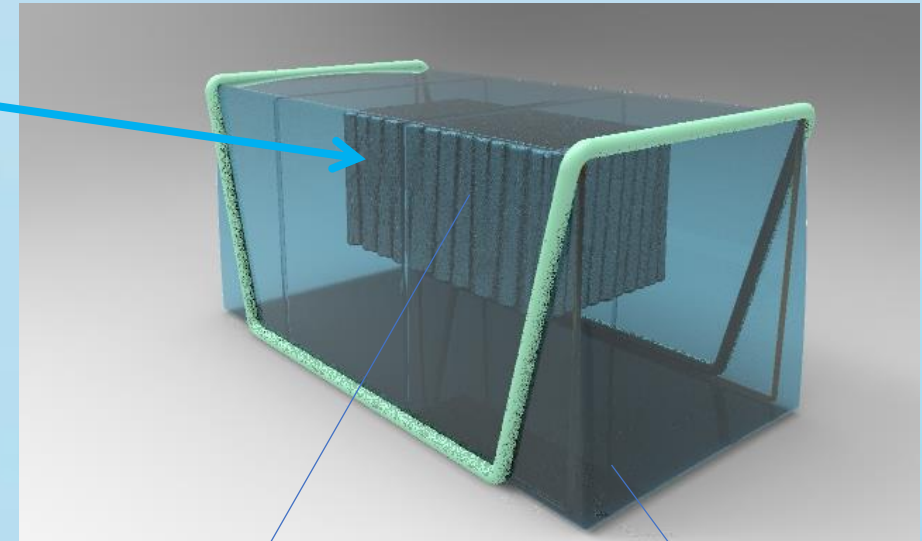
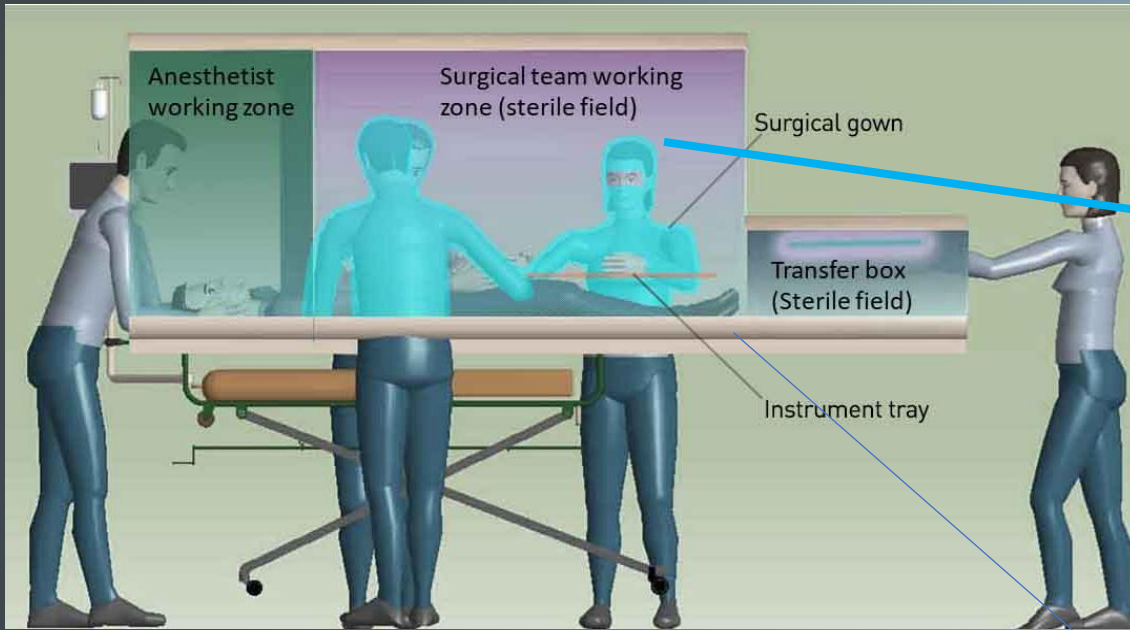


- Patient No:EP2413018 (Filed on June 30,1981)
- Pub. No. WO 2010/126956 A1, Pub. Date: Nov. 04, 2010
- Pub. No.: WO2010/105005 A1, Pub. Date: Jun. 16, 2010

Most of the designs are similar to the surgi box



Final concept



Sterile enclosure

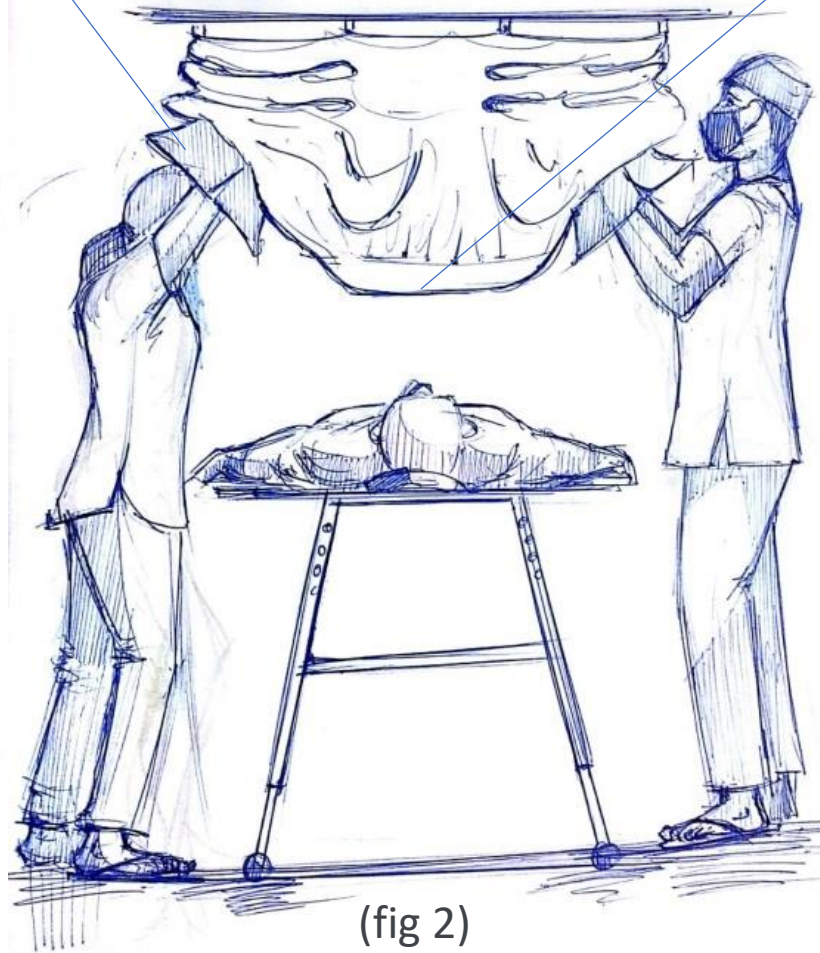
Outer structure which contains the sterile enclosure. The surgical team and equipment's will be positioned in the inside enclosure



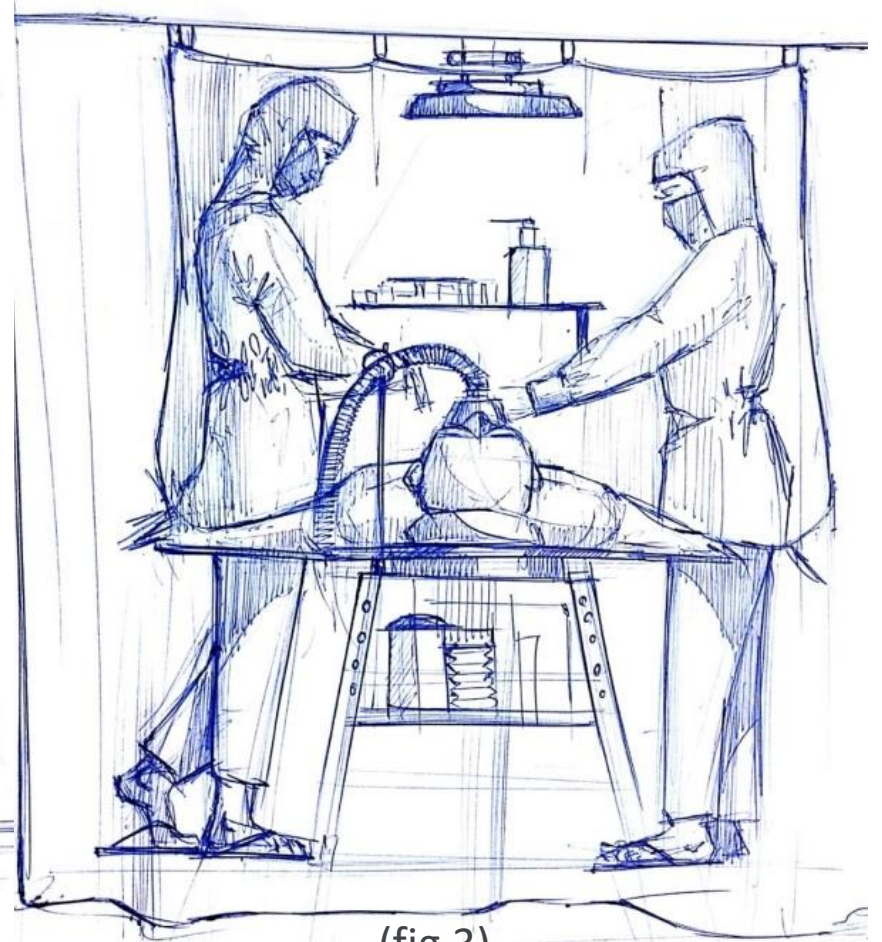
Final design consists of a sterile enclosure within a portable outer enclosed structure similar to a camping tent. Surgical gowns are attached to the openings at the sides of the inner enclosure, the surgical team can access the sterile field by entering to gowns.



(fig 1)

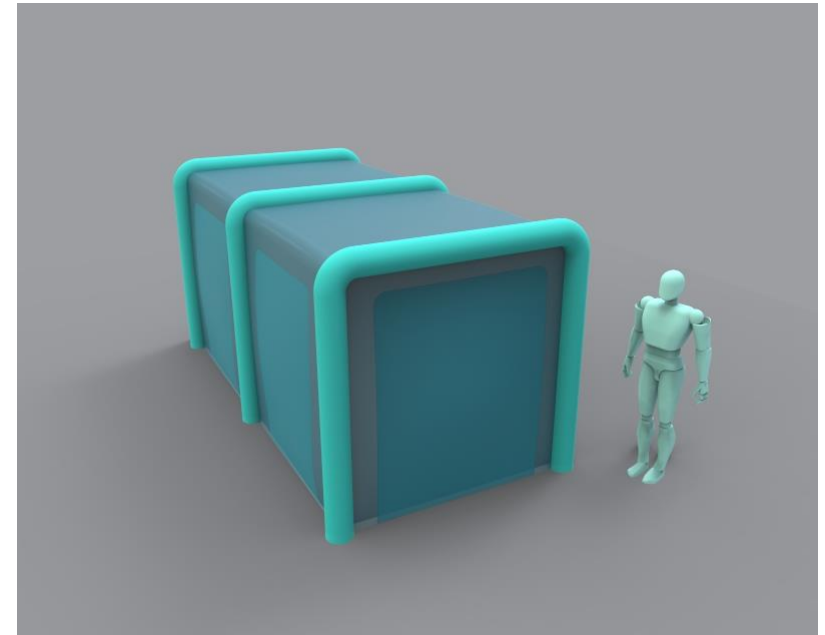
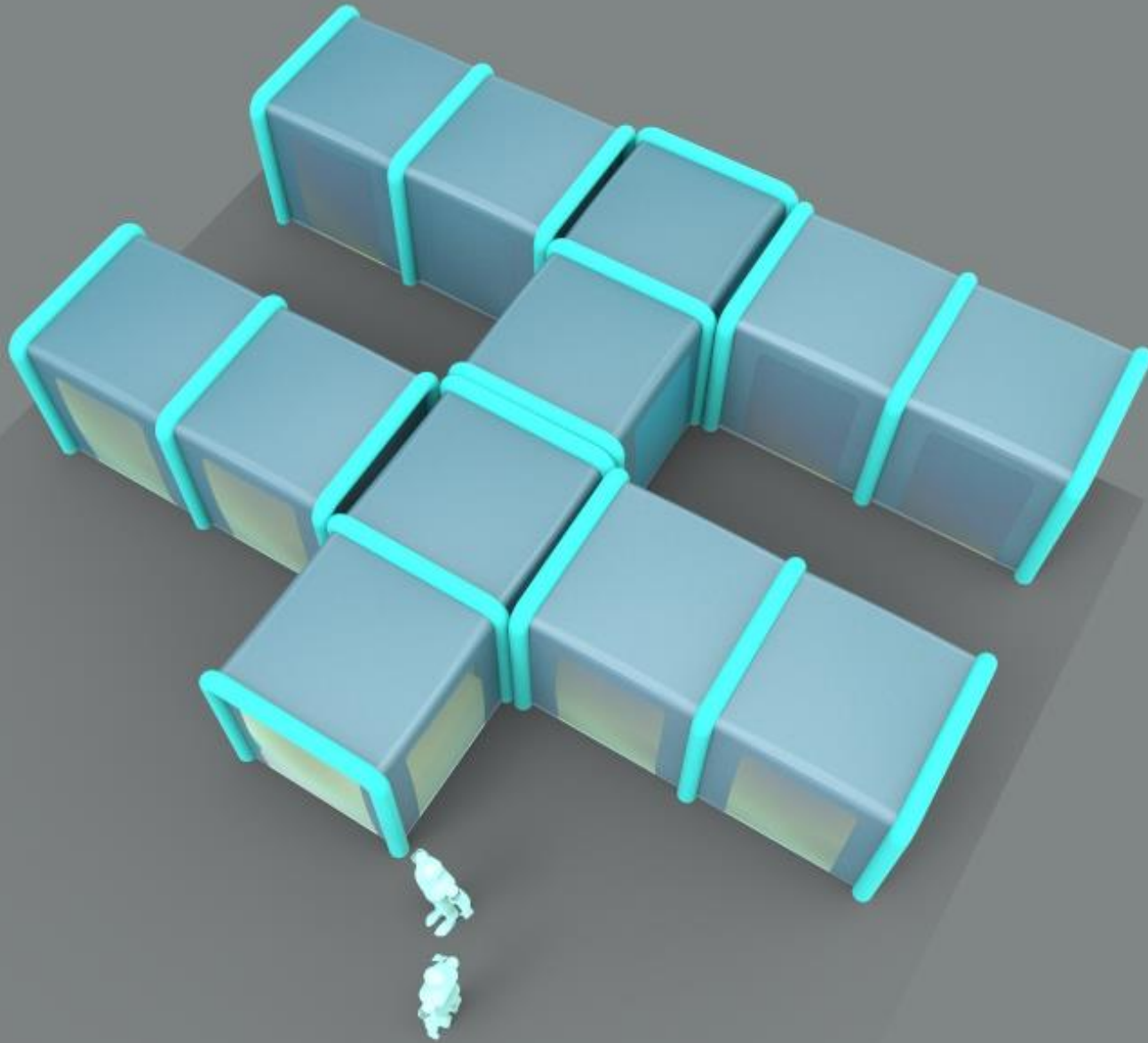


(fig 2)



(fig 3)

The patient will be positioned beneath the sterile enclosure after anesthesia (fig 1) and the knot at the base is opened, the surgical team enters into the sterile enclosure through the surgical gown attached (Fig 2, they 1st insert their hands into it), The upper body of the surgical team is inside the sterile enclosure, they can access the patient's area of surgery through the opening at its base. The enclosure will be connected with an air purifier and positive air pressure will be maintained throughout.



Hand pump for inflating
the OR structure

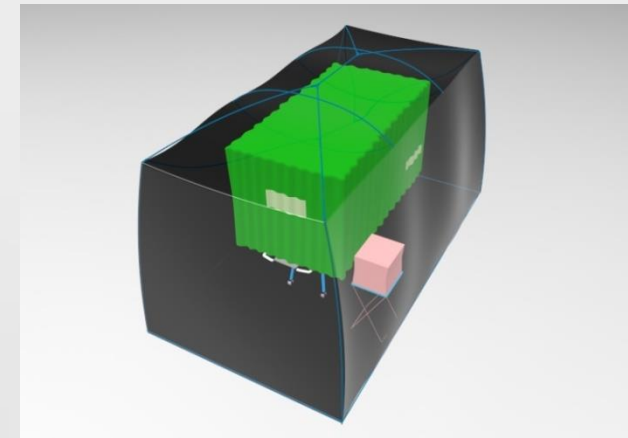
In the concept the outer structure consisting sterile enclosure is made inflatable such that it will be fitted in a backpack when deflated. Electric pump, hand pump etc. could be used for inflating it. Such units could be interconnected (left) thus forming an OR complex if required.



Pneumatic structures available in the market



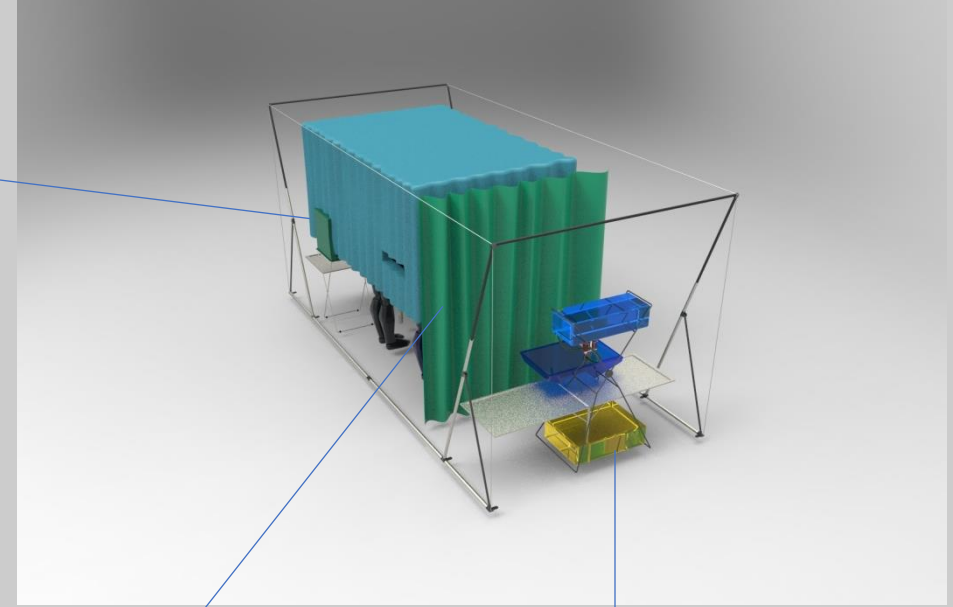
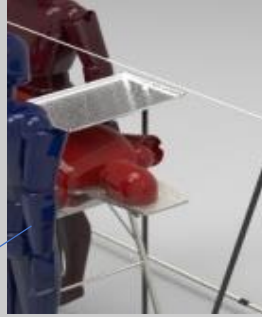
The table have lateral and longitudinal tilt adjustment with height adjustment feature.
Or other field operation tables could be integrated with the design



Final concept which can be fitted in to a box of 130cm*30cm*30cm

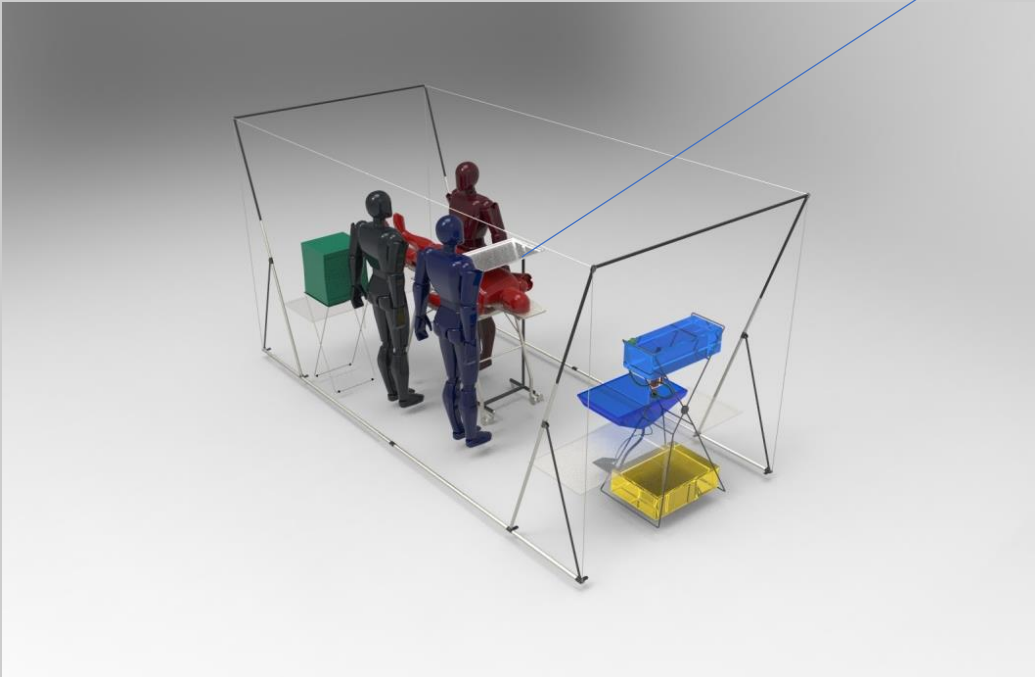
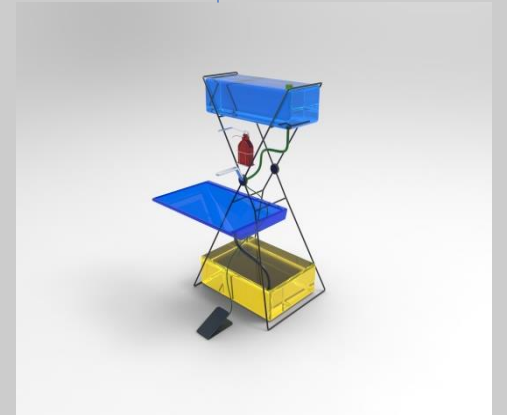
Instrument transfer box for storage of surgical instruments, the instruments can be accessed by the surgical team from the sterile enclosure.

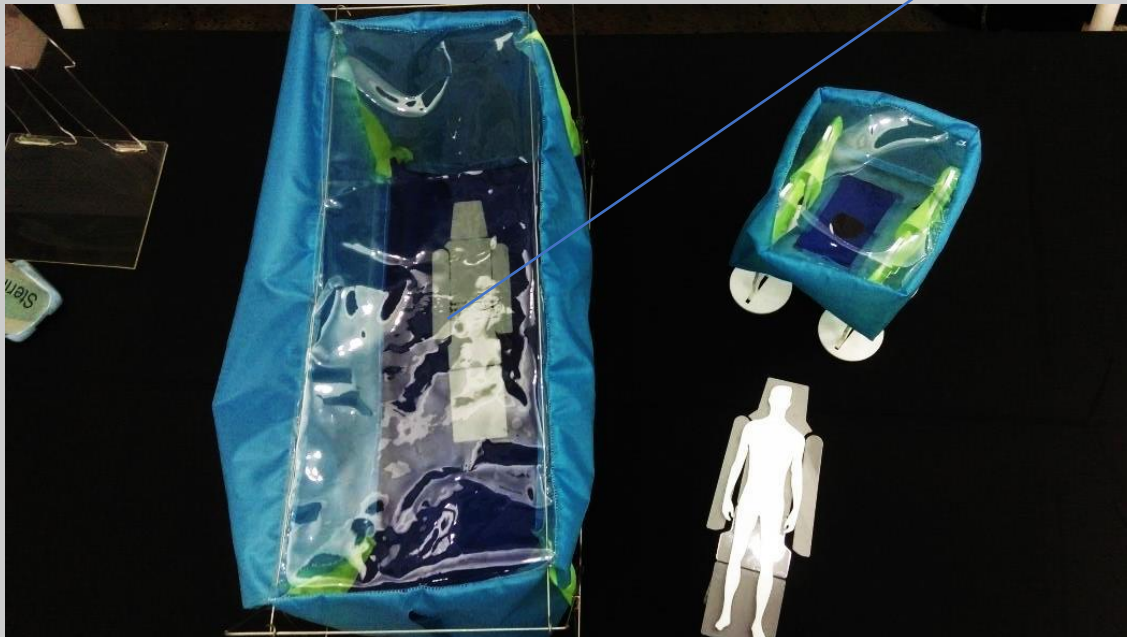
Instrument tray is positioned inside the sterile enclosure



Curtain for separating the scrubbing area

Portable scrubbing unit contains water and chemicals for sanitizing hands of surgical team.





1/10th scale model