

# Patient isolation carriage (COVIAGE)

## Technology

Duke inventors have reported an isolation chamber to be used around a patient's bed (or stretcher) designed for COVID-19 positive patients and patients with other infectious pathogens. The goal of this device is to minimize contamination of the environment by the pathogen and protect health care workers from getting infected during transportation as well as during hospitalization of infectious patients. The device is an additional protective layer of protection between the patient and the healthcare workers (or family members). The device is universal (fits all hospital beds and EMS stretchers) collapsible and adaptable to the hospital bed (or stretcher). The frame of the device allows healthcare professionals to move the bed while this is installed. There are many amenities included for fast patient access, all of which were implemented after thorough feedback from healthcare professionals and three rounds of prototypes shown to them. Usability and workflow evaluation study showed that up to 70% of nursing tasks can be performed without the need to open the chamber or tent. Satisfaction rates from nurses and medical providers have reached 95% at the second prototype stage.

## COVID-19 Application

This invention can be used during transportation and hospitalization of COVID-19 positive patients to protect healthcare workers from becoming infected.



### Duke File (IDF) #

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### Inventor(s)

- Economopoulos, Konstantinos
- Bigdeli, Yaas "Yaas"
- Fearis, Paul
- Patel, Kanishka
- Richardson, Eric
- Rosenthal, Kevin
- Shaw, Ryan
- Thompson, Theresa
- Vaughn, Jacqueline "Jacqueline"
- Wesorick, Benjamin "Ben"

### Links

- [From the lab of Dr. Konstantinos Economopoulos](#)

### College

School of Medicine (SOM)

### For more information please contact

Thomas, Dennis  
919-681-7580  
[dennis.thomas@duke.edu](mailto:dennis.thomas@duke.edu)