



## AN INNOVATIVE LOOK AT MEDICAL STORAGE

In redesigning the case for medical equipment storage in space, the major issues with the current design became apparent. First, the important medical supplies can be hard to access, as they are spread over multiple packs within the case with no good partition between them or means of systematically locating a particular item quickly. Second, opening the case allows the supplies inside to float unrestrained. And third, the actual case does not optimally use the space it takes up.

The solution to these problems is a new type of pack shaped like a hexagonal cylinder (based on origami). With this design, each of the six sides can open independently, or the whole case can be opened like a flower for easy access. This shape also enables a more efficient usage of space, as multiple smaller cases can be easily packed together. These smaller cases also help in partitioning the separate types of medical devices needed.

For example, a procedure currently will call for X number of one medicine, Y number of another medicine, and two syringes. The astronaut then has to find the packs where all of these supplies are in the current case, locate the supply within the pack, and make sure to choose the right medicines in a stressful environment. The hexagonal system would instead tell the astronaut to open Case-4 Side-2, Case-5 Side-4, and all of Case-7. Each of these would all be clearly and intuitively marked, thus expediting the actions of the astronaut.

