

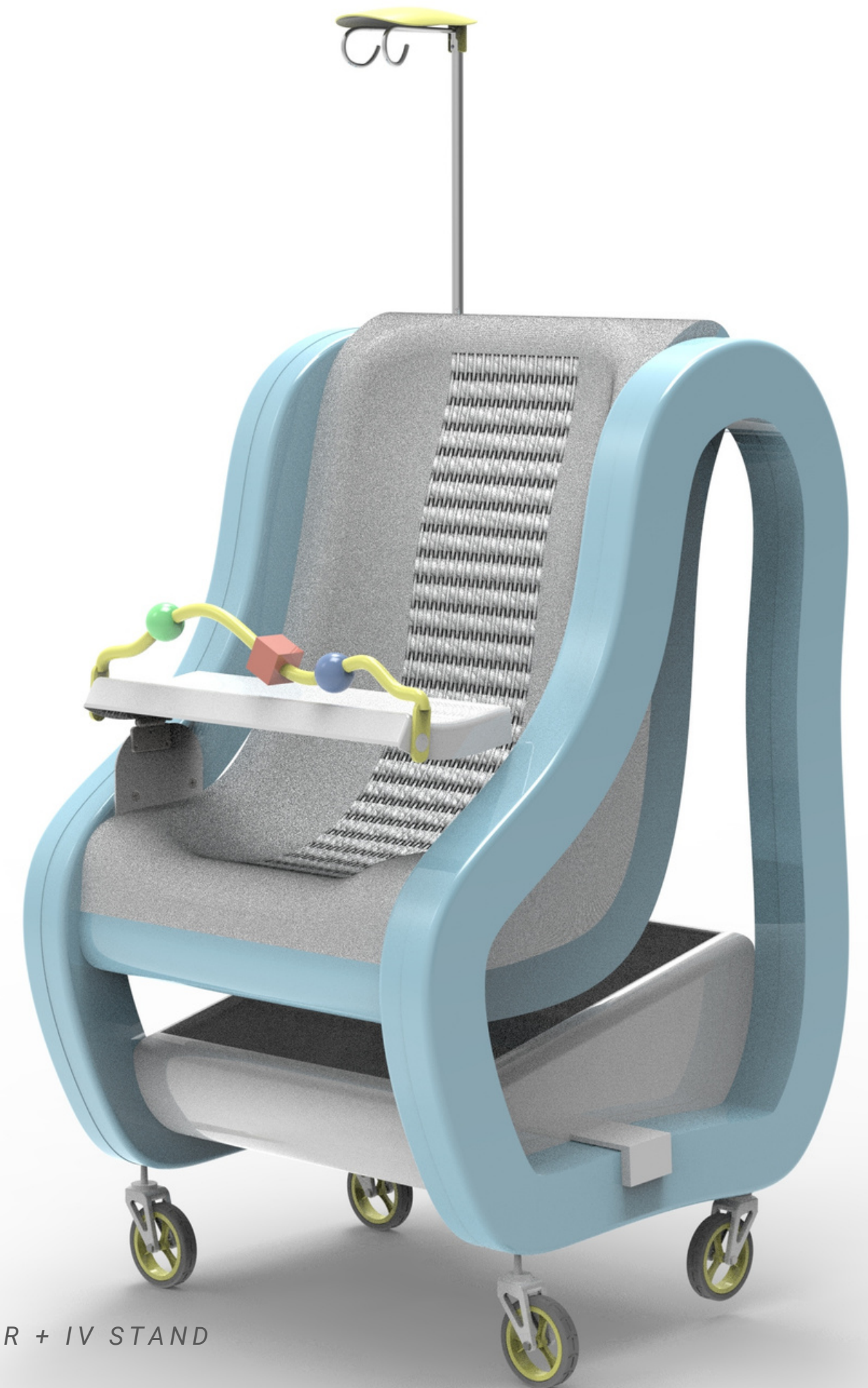
PERAMBULATOR

DESIGN FOR MANUFACTURABILITY, SPRING 2022

INSTRUCTOR: JD ALBERT

The Perambulator helps parents and caretakers easily move children around while remaining connected to an IV bag or tube feed. It prioritizes comfort for the child, while simultaneously providing easy access to medical supplies, storage space, and easy maneuverability for caretakers.

The Perambulator was designed and modeled with manufacturability concepts and methods learned throughout the course. Design decisions and material choices were made with manufacturability restrictions in mind.



PERAMBULATOR - STROLLER + IV STAND

DFA CONSIDERATIONS

- Poka-yoke for frame alignment
- Reduced part count by combining seat and back into singular part
- Maximized symmetry
- Self-aligning storage basket

FRAME

Materials: ABS
Color: Pantone 551 C | #A3C7D2
Process: Injection Molded
Draft: 1 degree
Uniform Wall Thickness

SEAT

Materials: Polyurethane
Process: Molded
Density: 0.03 to 0.05 g/cm³
Attachment: Adhesive

BASKET

Materials: ABS
Color: Pantone 11- 0601 TPX
Process: Injection Molded
Draft: 1 degree
Uniform Wall Thickness

