



Second  
Nature  
Solutions

## Construction:

- The base of the canvas of this prototype, the dolly itself, is made of steel tubing. This type of dolly was chosen for its particularly large base to accommodate for the modifications we applied to it
- The raisable platform is made of plywood for lightweight rigidity
- The raisable platform is made possible with the use of a heavy duty scissor jack powered by an electric source
- The wheels are plastic/rubber stair climbing wheels arranged to negotiate stairs with ease

## Benefits:

- Effortless transport of objects of any weight/shape with the dolly approach
- Stair climbing wheels allow for Elissa to transport heavy loads up and down the stairs with ease
- The electric jack lifting system prevents Elissa from putting additional stress on the scar tissue surrounding her wires by reducing the amount of awkward lifting motions
- Simplicity of design leads to minimal requirement of fine motor tasks with her hands

## Future Refinements:

- Emergency braking system
- Weight reduction
- Electric raising system technology
- Portability/foldability

## Main Functions:

- Supports heavy loads (around 10kg)
- Helps lift objects to a more convenient height
- Negotiates various everyday terrain (examples: Stairs, bumps, tight corners, etc.)









