PROBLEM STATEMENT
• Stroke survivors tend to have loss of function in one or more limbs, resulting in needing physical therapy
• It can be hard to continue that therapy away from the doctor’s office, resulting in limited access of treatment
• AlonTree is striving to create at home physical therapy devices for the regeneration of limb strength and motion

REQUIREMENTS
• Multiuse – Paw must be useable with different “modes”, Slide but be useable in conjunction with the paw at multiple height settings
• Lightweight/Portable – Slide and Paw must be easy to carry with one hand and easy to install, and move from place to place
• User-Friendly – Easy to understand and use
• Manufacturable – Material is easy to obtain and use
• Ergonomic – Paw must be comfortable, practical, and effective use with the patient’s hand

CONCEPTS
FINAL DESIGN, APPROACH, PLAN
AlonSlide – The final design for the slide includes a more robust build with aluminum supports, and a combination of PLA 3D printed setting teeth and acetal base. (The current design for the slide includes the wood prototype slide as the design was not changing, and materials were outside of budget to remake it).

RESULTS
SUMMARY AND CONCLUSIONS
AlonSlide
• Features a more robust and durable build
• Offers more height settings for more gradual changes for the patient
• Works with special AlonPaw setting for more versatility

AlonPaw
• Features multiple settings to work different skills and movements including but not limited to: crawling, general movements, hand balance, and AlonSlide work
• Comfortable in the hand and supportive
• Adjustable for different hand sizes and shapes

FUTURE WORK
The team would like to expand the AlonSlide in the future to be Bluetooth and have lights, as well as re-work the weight of the slide and how easy it is to adjust back to its storage setting.

TEAM & ACKNOWLEDGEMENTS
Team 12
• Allison Barrick - ME
• Manon Loreille - ME
• Julia Mouer - ME
• Dalton Whitaker – ET

Mentor
• Tom Spendlove

Sponsor
• Alon Kaplan