

# Bimodal Ankle-Foot Prostheses for Improved Standing Balance



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## Why this research is important:

Current ankle-foot prostheses are designed primarily for walking and are not ideal for standing stability.

## Summary:

The VA MADE Program has developed a prosthetic ankle-foot system that has separate modes for standing and walking. Using sensors, the system can detect when the user is standing or walking. Then, the prosthesis automatically responds by becoming more stable or flexible. The VA MADE Program is collaborating with a United States company to commercialize this technology.

## How the research will improve Veterans' lives:

This new prosthesis will improve the balance and balance confidence of Veterans with lower-limb amputations, leading to increased participation in social activities, reductions in falls, and improvements in the quality of life for Veterans with lower-limb amputations.



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