

CONCLUSION

Initial functional tests with the Pointdexter are encouraging. Adding Pointdexter to a multi-articulating hand improved the user's ability to grasp small objects while retaining normal hand function and anthropomorphic shape of the hand. Ideally, this design will increase prosthesis use and thus help to decrease overuse injuries in the intact limb from the relatively young UL amputee population.

ONGOING / FUTURE WORK

Additional research funding has been acquired to continue the project and implement various design changes and expand functional testing with human subjects. Anecdotal feedback from users highlighted a desire for more precise, secure, and strong grip patterns in the multi-articulating hand. Design efforts are underway to improve strength and security of grasp in order to gain even more functionality. Several changes have been implemented and initial functional tests with the improved design are encouraging. Also, while the Pointdexter was originally designed to work with the Bebionic hand, a new version has been developed to integrate with another popular multi-articulating hand, the iLimb from Össur (Figure 9).



Figure 9: Photographs of the Pointdexter designed to integrate with the iLimb hand from Össur.

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