

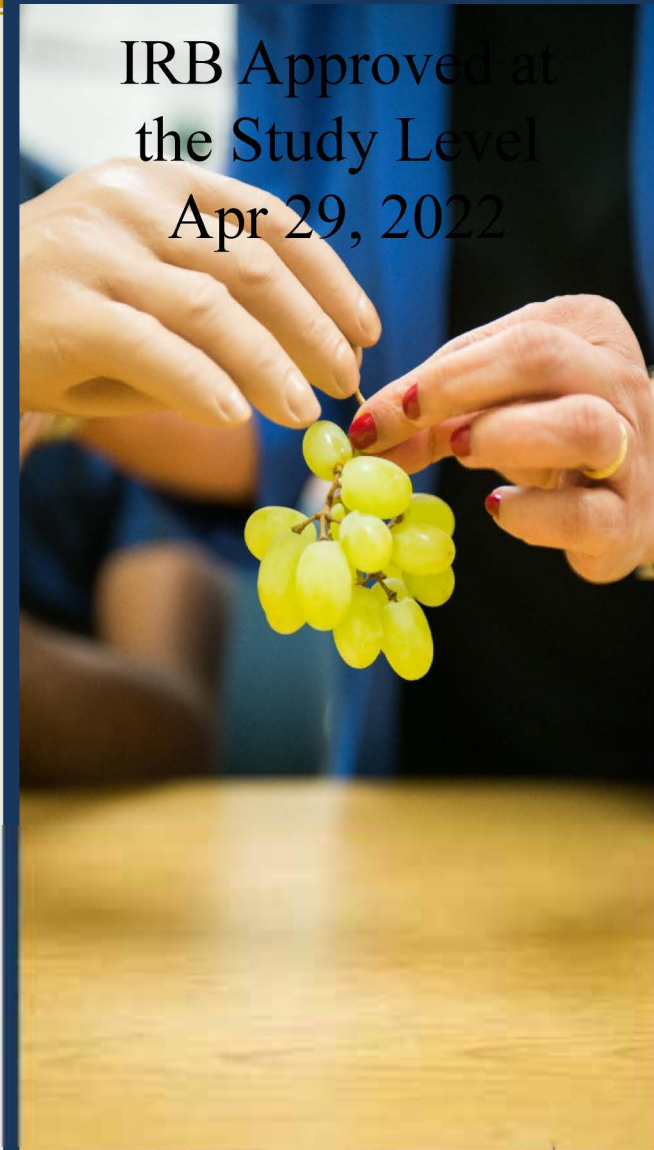
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Neural Enabled Prosthesis for Upper Limb Amputees

Research Study Contact Information:

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IRB Approved at
the Study Level
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ANS-NEPH System

— Median Nerve
— Ulnar Nerve

Implanted electronics deliver stimulation via fine wires to peripheral nerve fibers, thus eliciting sensations of position or force

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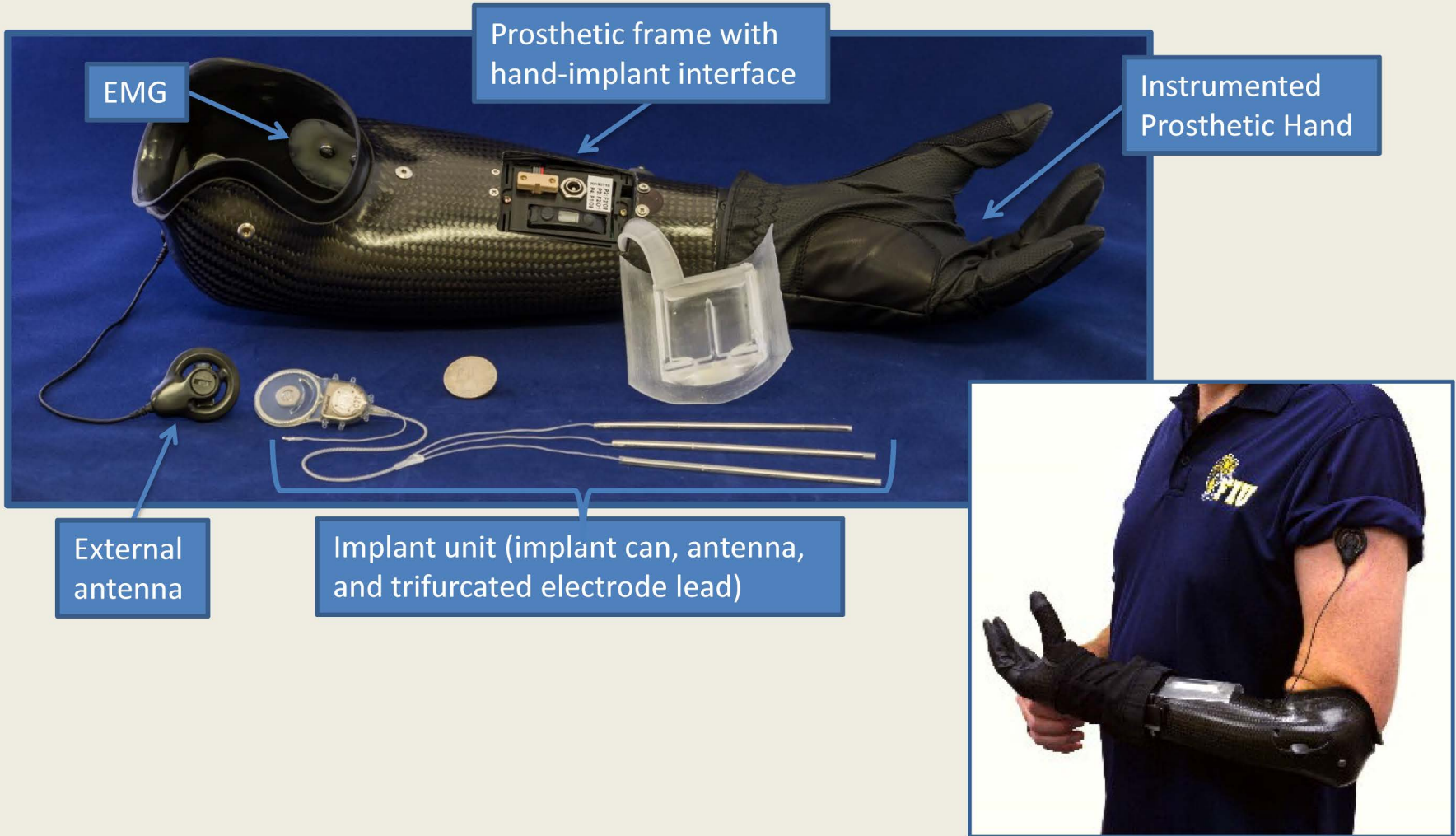
DOD / USAMRAA W81XWH-19-1-0839

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Sensors in the prosthetic hand detect position and contact forces

External components determine stimulation parameters and wirelessly communicate with implanted electronics

ANS-NEPH System



ANS-NEPH Participation Timeline

Pre-implant sessions		Duration		
Informational meeting (Location(s): A, B, or D)		~2 hrs		
Informed consent (Location(s): A or D)		~2 hrs		
Myoelectric prosthesis eligibility and fitting (Location(s): B)		~2 hrs/session (1-3 sessions)		
Neurological assessment (Location(s): C)		~2 hrs		
Surgical assessment/planning (Location(s): D/E)		~4 hrs		
Functional assessment – baseline (Location(s): A)		~10 hrs over several sessions		
System implantation (Location(s): A/B/D/E)				
Implant session: pre-op, surgery, post-op (Location(s): D/E)		~8 hrs		
Post-implant observation (Location(s): D/E) (within 3-5 days post-surgery)		½ hr		
Post-implant fitting of myoelectric prosthesis (Location(s): A,B)		~10 hrs over several sessions		
Experimental sessions (Location: A)				
Phase	Time period	Frequency of sessions	Total Sessions	Duration per Session
1	Week 1 - 12	Set of 3 sessions every week	36	2-3 hrs
2	Week 13 - 24	Set of 3 sessions every 4 weeks	9	2-3 hrs
3	Week 25 - 104	Set of 3 sessions or* 1 session every 6 weeks	30	2-3 hrs
Locations:				
A	Research Site			
B	Prosthetic Practice			
C	Neurological Practice			
D	Surgical Practice			
E	Surgical Implantation			