

American Hand Therapy Foundation Proudly Announces Our 2022 GRANT RECIPIENTS



BURKHALTER NEW INVESTIGATOR AWARD GRANT

This grant is generously supported by the Doris Ann Slack Upper
Extremity Education and Research Innovation Fund.

RECIPIENTS:

Christine Mulligan, OTD, CHT
Celeste Freeman, OTR/L, CHT
Giovanna Fichera, OTD



“IMPLEMENTING A NOVEL SPLINTING TECHNIQUE USING 3D MODELS FOR PATIENTS WITH SCLERODERMA AND ARTHRITIS”

The study aims to determine the feasibility of a non-contact custom splint fabrication method for patients with chronic diseases suffering from hypersensitive skin or compromised skin integrity. Custom splinting by occupational therapists involves molding low-temperature thermoplastic material directly on patients’ skin; however, skin sensitivity is a contraindication for splint fabrication. This study substitutes the traditional splinting methods by avoiding fabricating the splint directly on the patient’s hand. Instead, the fabrication of a resting hand splint on a 3D model of the patient’s hand provides patients with hypersensitive skin the opportunity to benefit from a custom-made splint. Each participant will wear one resting hand splint during hours of sleep for six weeks.

The primary hypothesis of this study is that: Individuals who wear a custom fabricated hand splint while sleeping will experience a decrease in pain, an increase in hours of sleep, maintenance of range of motion of the hand joints, and an overall increase in the ability to complete occupation-based tasks by the end of the study.

JUDY BELL-KROTOSKI “GRAB THE EVIDENCE” AWARD

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Extremity Education and Research Innovation Fund.

RECIPIENTS:

Tara Packham, OTReg(Ont.), PhD
Isabelle Quintal BSc erg., MSc



“RELIABILITY AND VALIDITY OF SOMATOSENSORY MEASUREMENT TECHNIQUES: A PROOF-OF-PRINCIPLE MEASUREMENT STUDY OF NOVEL TOOLS TO EVALUATE ALTERED SENSATION”

Is sensory loss or sensory gain the driver of neuropathic pain in my client? What treatments work for neuropathic pain conditions in the hand and upper limb? To answer these questions, reliable and valid screening and outcome measures of both hypoesthesia and hyperesthesia are required. The somatosensory pain rehabilitation method has proposed using calibrated monofilaments to evaluate the extent and severity of hypo and hyperesthesia: these methods are known as esthesiography, allodyniography and the rainbow pain scale. However, these procedures have not been validated extensively using robust methods. This project will use double-blinded, placebo-controlled testing where healthy volunteers will be evaluated for areas of induced numbness or allodynia on the forearm to provide robust estimates of inter-rater reliability and discriminative validity in a controlled setting. Temporary sensory alterations will be induced with EMLATM for numbness and ZostrixTM for allodynia, with IcyHotTM as an active placebo creating a tingling or cooling sensation without altering mechanical sensitivity. If the proposed evaluation methods can consistently and accurately screen for and map the extent of known (induced) sensory alterations, this will add support for their use in clinical practice, and justify use in future research on the associated treatment methods.

JANET ALBRECHT MEMORIAL SCHOLARSHIP

RECIPIENT:

Andrew Naylor, MS, OTR/L



“I am incredibly fortunate to be the recipient of the Janet Albrecht Memorial Scholarship, which will allow me to pursue my dream of becoming a certified hand therapist. This funding for educational resources significantly eases the financial burden of pursuing a CHT certification. AHTF’s mission of improving patient outcomes by promoting evidence-based practice through funding clinical and scientific research and education has a direct impact on my career aspirations and is assisting me in gaining the education required of a CHT. Additionally, this will benefit the organization of which I am employed should I pass the examination and become a certified hand therapist. I am grateful for this opportunity and would like to thank the board of directors for providing me with the funding necessary to accomplish my goal of providing the best possible care to patients through certification in hand therapy.”