



## IN THIS ISSUE:

Pediatric Hand Nerve  
Innovation Screening:  
Rock – Paper – Scissors  
Game

Grants Committee News:  
2015 Grant Award  
Recipients

AHTF Events During the  
ASHT Annual Meeting:  
Sunrise Breakfast and  
AHTF Silent Auction

New Member Highlights

Contribution Form

AHTF 2014-2015  
Contributors

## CHAIRMAN'S UPDATE



### Greg Pitts, MS, OTR/L, CHT

Chairman, American Hand Therapy Foundation

Regulatory changes are impacting the delivery and consumption of rehabilitation services across the nation. Payers and consumers are demanding value-based healthcare, which includes outcomes-based treatment delivery while controlling costs for upper extremity rehabilitation services. The American Hand Therapy Foundation (AHTF) recognizes the need to support practitioners to deliver evidence-based practice and is putting forth new initiatives to increase quality research with high clinical practice impact.

AHTF is launching new activities to raise funds, enhance communication with clinical and corporate stakeholders, and interact with clinicians and researchers. The board has set forth a new goal to raise \$40,000 for this calendar year. The funds will be used to increase the total monetary award for all three grants. The AHTF has approved an increase in funding for our largest grant, the Grab the Evidence grant, from \$10,000 to \$15,000 to attract a broader pool of experienced applicants furthering upper extremity rehabilitation research and evidence-based practice.

AHTF plans to meet these monetary challenges through increased outreach activities by two newly formed committees. The new donation committee, chaired by Dorit H. Aaron, will seek out corporate donations by contacting vendors inside and outside the hand therapy world. The collaboration committee, chaired by Jeanine Beasley, will educate our sister organizations and the academia on AHTF's goals and increase grant opportunity awareness.

AHTF has launched a new website offering state-of-the-art technology linking the foundation to the hand therapy world and beyond. The foundation website is maintained by Gary Solomon who understands the current technological environment and future trends that will help the foundation reach our fundraising and quality research goals. The new website allows contributors to make monetary contributions and immediately receive a donation receipt.

Finally we are conducting a new event, "Breakfast with a Scholar," to occur on Saturday morning during the ASHT annual conference. We hope that this event, chaired by Katie Yancosek, will inspire participants and raise funds for the foundation. Breakfast with a Scholar will feature keynote discussions by Dr. Peter Amadio and Nancy Cannon on the value of mentorship and will recognize many individuals who have dedicated their lives to advance the world of hand therapy. Please visit [www.AHTF.org](http://www.AHTF.org) for additional details and event registration.

**AMERICAN  
HAND THERAPY  
FOUNDATION**  
[www.ahtf.org](http://www.ahtf.org)

### MISSION:

The mission of the American Hand Therapy Foundation (AHTF) is to fund clinical and scientific research and education in order to advance the practice of hand therapy and quality of patient care throughout the world.

### VISION:

Our vision is for all evaluation and treatment methods in hand therapy to have well-documented, evidence based outcomes in the literature.

## Elaine Fess, MS, OTR, FAOTA, CHT

A 10-point questionnaire testing knowledge of nerve innervation of the hand found that physicians, in their first or second year of postgraduate training, only scored a mean of three (3) points out of the possible ten points. Additionally, no one individual identified the correct sensory distribution; or the correct motor function of the three nerves involved. As a result of this significant knowledge deficit, Davidson created a simple memory aid based on the children's game of Rock-Paper-Scissors.<sup>1</sup> Mehlman and Wall further applied this memory aid as a quick screening test of nerve innervation in children's hands.<sup>2</sup> This simple game facilitates voluntary cooperation of apprehensive, often distracted, children during testing of upper extremity peripheral nerves; while simultaneously enhancing positive interpersonal rapport between examiners and their young examinees.

### MEDIAN NERVE: ROCK POSITION

- Pronated full fist
- *Muscles: Pronator teres, Flexor carpi radialis, Palmaris longus, Flexor digitorum superficialis, Flexor digitorum profundus I and II, Flexor pollicis longus, Pronator quadratus, Abductor pollicis brevis, Flexor pollicis brevis (superficial head)<sup>3</sup>, Opponens pollicis, Lumbricals I and II*



### RADIAL NERVE: PAPER POSITION

- Extended wrist and digits with forearm pronation; add open-hand forearm supination
- *Muscles: Supinator, Extensor carpi radialis longus, Extensor carpi radialis brevis, Extensor carpi ulnaris, Extensor digitorum communis, Extensor digiti minimi, Abductor pollicis longus, Extensor pollicis longus, Extensor pollicis brevis, Extensor indicis proprius*



### ULNAR NERVE: SCISSORS POSITION

- 4<sup>th</sup> & 5<sup>th</sup> MPs & PIPs flexed; 2<sup>nd</sup> & 3<sup>rd</sup> digits extended and abducted away from each other; thumb CMC adducted, IP flexed
- *Muscles: Flexor carpi ulnaris, Flexor digitorum profundus III, IV, Abductor digiti minimi, Opponens digiti minimi, Flexor digiti minimi, Lumbricals III and IV, Palmar and dorsal interossei, Flexor pollicis brevis (deep head)<sup>3</sup>, Adductor pollicis*



### TO THE ROCK-PAPER-SCISSORS GAME, MEHLMAN AND WALL<sup>2</sup> RECOMMEND ADDING THE FOLLOWING:

- Anterior interosseous nerve (branch of median nerve): “OK” sign
  - Thumb tip to index finger tip in an “O” configuration
  - *Muscles: Flexor digitorum profundus I, Flexor pollicis longus, Pronator quadratus, Occasionally: flexor digitorum profundus II*<sup>4-6</sup>
- Posterior interosseous nerve (branch of radial nerve): “High-five” with wrist extension
  - Full extension of wrist and thumb and finger MP and IP joints<sup>2,5,7</sup>
  - *Muscles: Extensor carpi ulnaris, Extensor digitorum communis, Extensor digiti minimi, Extensor indicis proprius, Abductor pollicis longus, Extensor pollicis brevis, Extensor pollicis longus*

### Supplementary Reference<sup>8</sup>

Posterior interosseous nerve syndrome vs. radial tunnel syndrome: see reference #5.

### References

1. Davidson, A.W., *Rock-paper-scissors*. Injury, 2003. 34(1): p. 61-3.
2. Mehlman, C.T. and E.J. Wall, *Injuries to the shafts of the radius and ulna*, in *Rockwood and Wilkin's fractures in children*, J.H. Beaty and J.R. Kasser, Editors. 2010, Lippincott Williams & Wilkins: Philadelphia. p. 347-404.
3. Strickland, J.W., *Anatomy and kinesiology of the upper extremity, section 1*, in *Hand and upper extremity splinting principles and methods*, E.E. Fess, et al., Editors. 2005, Mosby Elsevier: St. Louis. p. 47-72.
4. Mackinnon, S.E. and C.B. Novak, *Compression neuropathies*, in *Green's operative hand surgery*, S.W. Wolfe, et al., Editors. 2011, Elsevier: Philadelphia. p. 977-1014.
5. Lister, G., *Compression*, in *The hand: diagnosis and indications*. 1984, Churchill Livingstone: New York. p. 201-217.
6. Rodner, C.M., B.A. Tinsley, and M.P. O'Malley, *Pronator syndrome and anterior interosseous nerve syndrome*. J Am Acad Orthop Surg, 2013. 21(5): p. 268-75.
7. Portilla Molina, A.E., et al., *The posterior interosseous nerve and the radial tunnel syndrome: an anatomical study*. Int Orthop, 1998. 22(2): p. 102-6.
8. Yu, H., R.H. Chase, and B. Strauch, *Atlas of hand anatomy and clinical implications*. 2004, St. Louis: Mosby Elsevier.

# AHTF GRANT REVIEW COMMITTEE NEWS: 2015 GRANT AWARD RECIPIENTS



By Caroline W. Jansen, PT, PhD, CHT

The news for at this time of the year is always festive: it is the time to announce the recipients of the AHTF and ASHT Grant Awards.

This year's grant recipients join a long line of therapists who collectively have published more than 16 papers in a variety of peer reviewed journals and delivered over 31 presentations, all as a direct result of AHTF funding. For many, this was only the start of their productive career. Grant recipients' scientific contributions included measuring grip strength, scar tissue pliability, finger goniometry, and the treatment of patients with flexor tendon injuries, carpal tunnels syndrome, trigger finger, and CMC arthritis. Traveling therapists provided education to therapists in Norway, Peru and Ecuador, and in the process brought back lessons learned from the international arena.

Let's therefore congratulate this year's winners of two AHTF grants, the Mackin Traveling Therapist grant, and the Burkhalter "Young" Investigator Grant for Clinical Research in Hand and Upper Limb Rehabilitation, and one ASHT grant, the ASHT Founder's grant.



*Rajani (middle) with local therapist Mohan on her 2013 visit*

This year's **Mackin Traveling Therapist Grant** recipient is Rajani Sharma-Abbott, OT, CHT who currently works at Medstar NRH Rehab in Baltimore, MD. Her traveling will take her to the Kirtipur Cleft and Burn Hospital in Kathmandu, the capital of Nepal, to teach the use of modalities to hand therapists with an emphasis on patient safety.

You may wonder, is this hospital still standing in this country that was recently ravaged by the massive earthquake? Actually, it is doing much more than that; the hospital is part of the Kirtipur Cleft and Burn Center which *is still standing and able to provide food and medical care*. AHTF is proud that Rajani can serve as ambassador for the profession of hand therapy. The grant award will not cover all costs associated with this opportunity, but will greatly assist in providing teaching materials and equipment.

The **Burkhalter Young Investigator Grant for Clinical Research in Hand and Upper Limb Rehabilitation** went to a team from the Mayo Clinic to conduct a multi-center project involving therapists from Jacksonville, FL, Rochester MN and Phoenix, AZ, entitled "The Efficacy of Dynamic Stabilization of the First CMC: A Prospective Randomized Study." The Principal Investigator is Kim McVeigh MBA, OTR/L, CHT. Co-Investigators are: Stephanie Kannas OTR/L, CHT, CLT-LANA, Cindy Ivy OTD, OTR/L, CHT, MEd. Dr. Peter Murray will serve as the project's physician champion. The authors will use the \$5000 awarded to fund research and statistical guidance throughout the conduct of the project.



McVeigh



Kannas



Ivy



Murray



Harpster



Dorich

Last but not least is the recipient of the **ASHT Founders Grant**. Karen Harpster, OT, Principal Investigator and Co-Investigator Jenny Dorich, OT, received their award for the project entitled "Improving hand function using a McKie thumb splint or kinesiology tape for thumb-in-palm deformity in children with cerebral palsy: A pilot study. The project will be conducted at the Cincinnati's Children's Hospital. The \$5000 funding will be used to pay for home program instructions, orthotic materials, kinesiotape, and statistical consultation.



## Dorit H. Aaron, OTR, MA, CHT, FAOTA

Dorit is currently in a private consulting practice, Aaron & Winthrop Hand Therapy Services, Inc. She co-owned the Houston Hand Rehabilitation Center, Inc., and co-developed/ oversaw the Texas Women's University Hand Therapy Fellowship program in Houston. Dorit is the past president of the ASHT (2012). She chaired the combined ASHT-ASSH meeting in San Antonio, Texas (2005), co-edited the special issue on pediatrics for the Journal of Hand Therapy (2015), and currently serves on the editorial board of the Journal of Hand Therapy. She has lectured extensively in the area of hand therapy both in the United States and abroad.

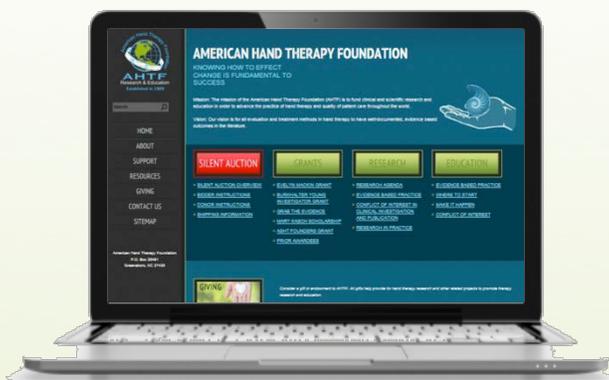
Dorit developed the Functional Dexterity Test (FDT). She has been awarded several professional honors, including Texas OT of the Year, the Texas OT Award of Merit, University of Texas Medical Branch's School of Allied Health's distinguished alumni award, and received the Lillian Parent lectureship.

Dorit volunteers her time at Shrine Hospital For Children, where she is involved in research, education and treatment of upper extremity patients, specifically those with brachial plexus conditions. She is heavily involved in philanthropic work treating patients in underdeveloped countries. Dorit will use her vast expertise to chair AHTF's Donation Committee.



Visit our updated website  
at [www.AHTF.org](http://www.AHTF.org)!

- Learn about the Foundation's Mission
- Donate online
- Get information about and apply for grants
- Tons of research resources



# AHTF EVENTS AT THE 2015 AMERICAN SOCIETY OF HAND THERAPISTS ANNUAL CONFERENCE



## OCTOBER 8<sup>TH</sup> – AHTF SILENT AUCTION

The American Hand Therapy Foundation will conduct their annual silent auction on October 8<sup>th</sup>, 2015 from 7:30 PM until 9:30 PM in the exhibit hall at the Sheraton Hotel in Downtown Denver. Everyone attending the conference is highly encouraged to participate and donate items. Similar to last year, the silent auction will be completely conducted through electronic billing and payment for items using Bidding Owl ([www.biddingowl.com](http://www.biddingowl.com)). Those wanting to donate items can register six weeks prior to the auction. Items can be viewed beginning four weeks prior to the auction and bidding will be open on September 25<sup>th</sup>. Please note that winning bidders must be present or have someone in proxy to claim items. All proceeds will go towards the AHTF in support of upper extremity research grants. The AHTF is the only national organization with the primary goal of promoting hand therapy and evidence-based medicine for upper extremity injuries.

The Hand Therapy Foundation thanks you for your generous support of this event.



*“Education is not the filling of a pail, but the lighting of a fire!”*

–William Butler Yeats

## OCTOBER 10<sup>TH</sup> – SUNRISE BREAKFAST

Start your day like a scholar! The American Hand Therapy Foundation (AHTF) will host its second annual reception. The early bird gets the worm as this year’s gathering is at sunrise! Join AHTF for a hearty breakfast in the Governor’s Suite at the Sheraton Hotel in Downtown Denver at 6:00 AM on Saturday, October 10<sup>th</sup>.

The reception is a celebration of hand therapy and the remarkable growth of the profession since its inception in 1977.

The event’s keynote speakers, Dr. Peter Amadio and Nancy Cannon, will discuss the value of mentorship and collaboration.

The AHTF will present a Lifetime Achievement Award to Evelyn Mackin, a founding member of the American Society of Hand Therapists.

Don’t miss this opportunity! Tickets are \$30.00 per person or \$50.00 for two (invite your mentor or mentee) or \$225.00 for a table of 10 (invite your clinical staff!). Tickets can be purchased on the AHTF website at [www.AHTF.org](http://www.AHTF.org)

All proceeds from this event directly support the central mission of the AHTF to fund research in hand therapy.

# AN OPPORTUNITY TO GIVE BACK TO THE PROFESSION OF HAND THERAPY



Dear Colleague,

The American Hand Therapy Foundation invites you to participate in its annual appeal for funds to support therapist clinical and scientific research. This is an opportunity for you to help AHTF fund clinical and scientific research, establish standards of practice in hand therapy, and advance the practice of hand therapy.

The Foundation was established as a 501(c) 3 Not-For-Profit Organization in 1989, to help make seed grants available to therapists in preparation for them to have increased chances for larger outside grants. First time grants today are even harder to achieve. Self-starting and funding our own professional research makes sense. We face a great challenge especially at this time of increased need for substantiation of practice and changes in health care administration. We need your help!

A monetary contribution at any level provides the opportunity for therapy grants. The greater the funds we receive, the more grants possible, and any contribution is welcomed and appreciated. With these grants we are able to provide an investment in our profession. Your contribution can help move us forward.

If you would like to contribute, you can do so through our website: [www.ahtf.org](http://www.ahtf.org) or by completing the contribution form in this newsletter and mailing a check payable to the American Hand Therapy Foundation to American Hand Therapy Foundation P.O. Box 38491, Greensboro, NC 27438.

You may also wish to consider applying for one of our grants which are found detailed on our website: [www.AHTF.org](http://www.AHTF.org). Thank you for your consideration of this special request, as well as your ongoing support of the American Hand Therapy Foundation.

Sincerely,

**Gregg Pitts, MS, OTR/L, CHT**

Chairman, American Hand Therapy Foundation



# CONTRIBUTION FORM



Name: .....  
First Last Designations

Business: .....  
If applicable

Address: .....  
Street  
.....  
City State Zip code

Phone: .....

Email: .....

I would like to contribute \$ ..... to the American Hand Therapy Foundation

- Friends of AHTF \$1 – \$99
- Bronze “Thumbs Up” Club \$100 – \$249
- Silver “Hand Shake” Circle \$250 – \$499
- Gold “High Five” League \$500 – 999
- Platinum Contributor \$1,000 – \$4,999
- Diamond “Standing Ovations” \$5,000 +

I would like to contribute \$ ..... to the following designated area:

- ASHT Founder’s Grant
- Mary Kasch Hand Therapy Certification Scholarship

I would like to contribute \$ ..... in HONOR/MEMORY of:  
.....

Thank you for your kind contribution to the American Hand Therapy Foundation!  
AHTF is a 501(c)(3) not-for-profit organization.  
Please keep a copy of your canceled check for tax purposes.

**PLEASE MAIL YOUR CONTRIBUTION TO:  
AMERICAN HAND THERAPY FOUNDATION  
P.O. Box 21992  
LEXINGTON, KY 40522**

# AMERICAN HAND THERAPY FOUNDATION 2014 CONTRIBUTIONS



*The AHTF Board of Directors thanks the following individuals and corporations for their generosity.*

## **PLATINUM CONTRIBUTORS \$1,000 – \$4,999**

3-Point Products – *in Honor of Evelyn Mackin-Henry*  
Elaine and Steve Fess – *in Memory of Judy Bell-Krotoski*  
Hand Care  
Louisiana Chapter, ASHT

## **GOLD “HIGH FIVE” LEAGUE \$500 – \$999**

Aaron & Winthrop Hand Therapy Services, Inc.  
Anonymous – *in Memory of Judith Bell Krotoski*  
North Coast Medical, Inc.  
Terri Wolfe – *Mary Kasch Hand Therapy Certification Scholarship*

## **SILVER “HAND SHAKE” CIRCLE \$250 – \$499**

Lynnlee Fullenwider  
Nancy Petty

## **BRONZE “THUMBS UP” CLUB \$100 – \$249**

Rina Chawla  
Elaine Fess – *in memory of Gloria Hershman, 3<sup>rd</sup> ASHT President, and dear friend*  
Kathleen Hugins  
Caroline Jansen – *in memory of Judith Bell Krotoski*  
James King  
Evelyn Mackin – *in memory of Gloria Hershman*  
Judy L. Matsuoka-Sarina  
Karyn Mori – *in memory of Thomas G. McClure, PT, CHT*

## **FRIENDS OF AHTF \$1 – \$99**

Marilyn Andrew  
Robin Brunton – *in memory of Judith Bell Krotoski*  
Jane Fedorczyk  
Caroline Jansen  
David and Sarah Kasch – *Kasch Scholarship Fund*  
John Kasch – *Kasch Scholarship Fund*  
James King – *in honor of Elaine Fess, MS, OTR/L, FAOTA, CHT*  
Judy L. Matsuoka-Sarnia  
Donald Pitts  
Deborah Rider – *in honorable memory of Mary Kasch*  
Missy Thurlow  
Angie Tinson  
Lisa Yee – *in memory of Judith Bell Krotoski*

# AMERICAN HAND THERAPY FOUNDATION 2015 CONTRIBUTIONS



*The AHTF Board of Directors thanks the following individuals and corporations for their generosity.*

## **DIAMOND “STANDING OVATION: \$5000+**

Florida Hand Society – *in memory of William Burkhalter*

## **GOLD “HIGH FIVE” LEAGUE \$500 – \$999**

Karen Lauckhardt

## **SILVER “HAND SHAKE” CIRCLE \$250 – \$499**

Aaron & Winthrop Hand Therapy Services, Inc.

Aaron Family Fund of the Houston Jewish Community Foundation – *in memory of Donald Kenneth Pitts*

Peter Amadio – *in memory of Donald Kenneth Pitts*

Elaine and Steve Fess – *in memory of Donald Kenneth Pitts*

North Coast Medical, Inc.

## **BRONZE “THUMBS UP” CLUB \$100 – \$249**

Jeanine Beasley

Carla Cleary – *in memory of Judith Bell Krotoski*

Roslyn Evans – *in memory of Judith Bell Krotoski, William Burkhalter, and Mary Kasch*

Elizabeth Fanning

Maureen Hardy

Caroline Jansen – *in honor of Paul LaStayo for his dedicated service to the Journal of Hand Therapy*

David, Sarah and Archer Kasch – *Mary Kasch Scholarship*

Karen Roeming

## **FRIENDS OF AHTF \$1 – \$99**

Jim King

Gary Solomon

Beth Thompson

Amy Umansky

Lisa Yee – *in memory of Judith Bell Krotoski*

# BOARD OF DIRECTORS



The American Hand Therapy Foundation was founded in 1989, the Foundation currently has thirteen members of the Board of Directors including:



**Greg Pitts**  
MS, OTR/L, CHT  
Chairman



**Jim King**  
MA, OTR  
Vice Chairman



**Kathleen E. Yancosek**  
PhD, OTR/L, CHT  
Secretary



**Elaine Fess**  
MS, OTR, FAOTA, CHT  
Treasurer



**Caroline W. Stegink Jansen**  
PT, PhD, CHT  
Chair, Grant Review Committee

**THE BOARD OF DIRECTORS IS GRATEFUL FOR  
YOUR CONTRIBUTIONS AND SUPPORT.**

# BOARD OF DIRECTORS



**Dorit H. Aaron**  
OTR, MA, CHT, FAOTA  
Board Member



**Peter C. Amadio**  
MD  
Board Member



**Jeanine Beasley**  
EdD, OTR/L, CHT, FAOTA  
Board Member



**Sarah B. Goldman**  
PhD, OTR/L, CHT  
Board Member



**Karen H. P. Lauckhardt**  
MA, PT, CHT  
Board Member



**Gary Solomon**  
MBA, MS, OTR/L, CHT  
Board Member

## ADVISORY BOARD

**Kenneth R. Flowers, PT, CHT**  
**Evelyn Mackin-Henry, PT**

**Terri Skirven, OTR/L, CHT**  
**Robert M. Szabo, MD MPH**