CURRICULUM VITAE CHARLES R. SCOVILLE, PT, MEd, DPT

Colonel, Retired
Chief, Department of Rehabilitation
Walter Reed National Military Medical Center
8901 Wisconsin Ave
Bethesda, MD 20889-5600

EDUCATION (Civilian):

Baylor University Waco, Texas 2007 Doctorate of Physical Therapy

US Army-Baylor University Graduate Program in Physical Therapy Academy of Health Sciences, Fort Sam Houston, TX 78234-6100 1978 M.P.T. Physical Therapy

Ohio University, Athens, Ohio 1974 M.Ed. Physical Education 1973 B.S. Physical Education

EDUCATION (Military):

U. S. Army War College, 1999, Carlisle, PA Command and General Staff College, 1984, Fort Leavenworth, KS Army Medical Department Advanced Course, 1980, Fort Sam Houston, TX Army Medical Department Officers Basic, 1977, Fort Sam Houston, TX

PROFESSIONAL LICENSE:

Kentucky License Number PT 000737, 1979 - Present Ohio License Number PT 2690, 1980 - Present

APPOINTMENTS/POSITIONS:

Chief, Department of Rehabilitation Walter Reed National Military Medical Center 8901 Wisconsin Ave Bethesda, MD 20889-5600 March 2013 - Present

Chief, Amputee Patient Care Service Walter Reed National Military Medical Center 8901 Wisconsin Ave Bethesda, MD 20889-5600 Aug 2010- March 2013

Interim Director, DoD/VA Center of Excellence for Traumatic Extremity Injury and Amputation
US Army Office of The Surgeon General
5109 Leesburg Pike

Falls Church, VA 22401-3258 Nov 2009 – January 2012

Chief, Amputee Patient Care Service Walter Reed Army Medical Center 6900 Georgia Ave NW Bldg 2, 2nd Floor, Rm 2J51 Washington, DC 20307-5001 Aug 2003- August 2010

Executive Secretary
Panel on Individuals with Amputation and Functional Limb Loss
Defense Health Board
Five Skyline Place, 5111 Leesburg Pike, Suite 810
Falls Church, Virginia 22041-3206
Oct 2003 – November 2009

Chief, Physical Therapist Section Army Medical Specialist Corps Assistant Chief, Army Medical Specialist Corps Directorate of Health Policy HQDA Sky 6, Suite 684 5109 Leesburg Pike Falls Church, VA 22041-3258 Feb 2001 – Aug 2003

Research Physical Therapist
United States Army Research Institute of Environmental Medicine
Military Performance Division
42 Kansas Street
Natick, MA 07160-5007
Jan 99 – Feb 2001

Chief, Physical Therapy Service Assistant Chief, Department of Orthopaedics and Rehabilitation Womack Army Medical Center Ft Bragg, NC 28307-5000 Aug 96 – Dec 98

Director, US Army Sports Physical Therapy Residency Assistant Chief, Department of Surgery Keller Army Community Hospital West Point, NY 10996-1197 Jun 94 - Aug 96

Chief, Physical Therapy Service United States Military Academy Keller Army Community Hospital West Point, NY 10996-1197 Jan 91 - Aug 96 Staff Physical Therapist Tripler Army Medical Center Honolulu, HI 96859-5000 Jul 87 - Jan 91

Chief, Physical Therapy Clinic DeWitt Army Hospital Ft Belvoir, VA 22060-5166 Oct 86 - Jul 87

Physical Therapy Staff Officer, Surgeon General's Task Force on Fitness Consultant to the Surgeon General for Injury Prevention and Sports PT Office of the Surgeon General Fall Church, VA 22041 Mar 83 - Oct 86

Chief, Physical Therapy Clinic US Army Health Clinic, The Pentagon Washington, DC 20310-2300 Oct 81 - Mar 83

Chief, Physical Therapy Clinic US Army Hospital Berlin, Germany Apr 81 - Oct 81

Staff Physical Therapist Ireland Army Hospital Ft Knox, KY 40121-5520 Dec 78 - Apr 81

CLINICAL INSTRUCTION:

- Clinical Director, US Army Sports Physical Therapy Residency, United States Military Academy, West Point, NY, 1994 - 1996
- 2. Instructor, US Army Orthopedic Joint and Soft Tissue Trauma Fellowship, United States Military Academy, West Point, NY, 1991 1996
- 3. CCCE and CI for 6 8 Physical Therapy Students annually, United States Military Academy, West Point, NY, 1991 1993
- 4. CI for 1 2 PT Students and 4 6 PTA Students annually, Tripler Army Medical Center, Honolulu, HI, 1987 1991
- 5. CI for 1 PT Student, DeWitt Army Hospital, Ft Belvoir, VA, 1986 1987
- CI for PTA 2 3 Students annually, Ireland Army Hospital, Ft Knox, KY, 1979 1981

NATIONAL & INTERNATIONAL PRESENTATIONS:

- 1. Care of Wounded Service Members: An Overview. Rehabilitation of Amputees. From Injury to Recovery: What lessons can be learned from each step. Leusden, The Netherlands May 2010.
- Developing a System of Care for the Combat Amputee and a Roadmap for the Future. State of the Science Workshop: Care of the Combat Amputee. Washington, DC. April 2010
- 3. Beyond Acute Care: The future of Amputee Care in the DoD and VA. American Physical Therapy Association Combined Sections Meeting, San Diego, CA. Feb 2010
- 4. Expert Panel, The Effects of Technology on Vision 2020. American Physical Therapy Association Combined Sections Meeting, San Diego, CA. Feb 2010
- Advances in Patient Care: Amputations and Prosthetics. Harry R. Gossling, M.D. Rehabilitation Lecture Series, 2006. Hospital for Special Care. New Britain, CT, 2006.
- 6. TO&E Medical Leaders Training Course. Force Health Protection on the Battlefield. "Rehabilitative Care: Amputee Care Program. Atlanta, GA, 2006
- 7. American Academy of Orthopaedic Surgeons, NIH: Extremity War Injuries. Amputation Is Not Isolated. Washington, DC, 2006
- 8. Center for Integration of Medicine and Innovative Technology Forum. Prosthetic Challenges: Design, Use and Functionality. Boston MA, 2005.
- 9. The United States Army Amputee Patient Care Program. 45th Annual Meeting. The Society of Military Orthopaedic Surgeons, Waikiki, HI, 16 December 2003.
- Evaluation and Treatment of Shoulder Instability. Short Course. Short Course. American Physical Therapy Association Scientific Meeting and Exposition. Washington, DC, 1999.
- 11. Rehabilitation After Shoulder Stabilization Procedures. Short Course. American Physical Therapy Association Scientific Meeting and Exposition. Orlando, FL, 1998.
- 12. Post-Operative Management Following Acute Shoulder Stabilization. 18th Annual Sports Medicine Physician-Therapist Team Concepts Conference. Sports Physical Therapy Section, American Physical Therapy Association. Williamsburg, VA, 1997.
- 13. End Range Eccentric Antagonist/Concentric Agonist Strength Assessment: A New Perspective in Strength Testing. American Physical Therapy Association, Combined Sections Meeting, Reno, NV, 1995.
- 14. Orthopaedic Sports Medicine Symposium, "Treatment of Patello-Femoral Pain", Biersdorf, Germany, 1992.
- 15. Orthopaedic Sports Medicine Symposium, "Rehabilitation Following Anterior Cruciate Ligament Reconstruction", Biersdorf, Germany, 1992.
- 16. Orthopaedic Sports Medicine Symposium, "Posterior Cruciate Ligament Injuries, Pre- and Post-Operative Rehabilitation", Biersdorf, Germany, 1992.
- 17. Orthopaedic Sports Medicine Symposium, "Physical Therapy Treatment of Shoulder Instability", Biersdorf, Germany, 1992.
- 18. Research Opportunities for the AMSC at the United States Military Academy. The Army Medical Specialist Corps Mary Lipscomb Hamerick Research Course, Silver Springs, MD, 1992.
- 19. As a representative of the Surgeon General gave numerous presentations on injury prevention, health promotion and fitness, including:
 - a) Fitness Facilitators Course, San Antonio, TX, 1983.
 - b) Department of Defense Fitness Symposium, West Point, NY, 1984.
 - c) Stress Management Conference, Ft Benjamin Harrison, IN, 1985.

- d) Action Officers Workshop, Army Health Fitness Program, Ft Benjamin Harrison, IN, 1986.
- e) Army Medical Specialist Corps Long Range Strategic Planning, Roanoke, VA, 1986.
- f) Fitness Facilitators Training Program, Fort Sam Houston, TX, 1986.
- g) Department of Defense Fitness Retreat, Virginia Beach, VA, 1986.
- h) Military Traffic Management Command Western Area Commander's Conference, Oakland, CA, 1987.

NATIONAL & INTERNATIONAL PRESENTATIONS & POSTERS CO-AUTHORED:

- Stinner DJ, Burns TC, Kirk KL, <u>Scoville CR</u>, Ficke JR, Hsu JR, The Late Amputation Study Team (LAST). Prevalence of Late Amputations During the Current Conflicts in Afghanistan and Iraq. Society of Military Orthopaedic Surgeons, Honolulu, HI, Dec 2009
- Franklin A, Pasquina P, Luu V, Howard R, Doukas W, <u>Scoville C</u>. Incidence of DVT and PE in the Combat Amputee. Abstract/Poster: American Academy of Physical Medicine and Rehabilitation 67th Annual Assembly, November 2006.
- 3. Greenwell G, Pasquina P, Doukas W, Scoville C, Luu V, Howard R. Incidence of Heterotopic Ossification in the Combat Amputee. American Academy of Physical Medicine and Rehabilitation 67th Annual Assembly. Abstract/Poster, November 2006.
- 4. Gambel J, Miller J, Pasquina P, <u>Scoville C</u>, Gajewski D. The US Army Amputee Care Program: Aggressive Rehabilitation to Promote the Highest Level Among Young, Adult, Traumatic Amputees. American Academy of Physical Medicine and Rehabilitation 65th Annual Assembly. Abstract/Poster, Phoenix, AZ, October 2004.
- Gajewski DA, Islinger RB, Gmbel JM, LaFrancois TJ, Miller JA, Polly DW, Ganz OS, Bergeron AL, LaFerrier JZ, Yancosek KE, <u>Scoville CR</u>: Amputee Care for Active Duty Personnel. 45th Annual Meeting The Society of Military Orthopaedic Surgeons, Waikiki, HI, 2003.
- Cuenca RA, Potter BJ, Javernick MC, Lin DL, Islinger RB, Gajewski DA, Murphy KP, Xenos JS, Doukas WC, <u>Scoville CR</u>. Limb Salvage and Amputation of the Lower Extremity in Opeation Iraqi Freedom Soldiers. 45th Annual Meeting The Society of Military Orthopaedic Surgeons, Waikiki, HI, 2003.
- 7. Uhorchak JM, <u>Scoville CR</u>, Williams GN, Arciero RA, St Pierre P, Taylor D: Risk Factors Associated with Non-Contact ACL Injury: A Prospective Four-Year Evaluation of 856 West Point Cadets. American Orthopaedic Society For Sports Medicine Annual Meeting, Orlando, FL, 2002.
- 8. Moore JH, Scoville CR, Ito MA, Frykman PN, Sharp MA: The effect of prolonged sub-zero temperatures on upper limb nerve conduction during artic ocean 2000 expedition. 48th Annual Meeting American College of Sports Medicine. Baltimore. MD. 2001.
- Evans, R.K., Sheehan, B.C. Nindl, C.J. Baker-Fulco, R.P. Mello, M.M. Murphy, C.E.Wade, <u>C.R. Scoville</u>. Changes in Lumbar Spine Bone Mineral Density of Healthy Men and Women in the Third Decade of Life: A 10-year Longitudinal Study. Presented at the 23rd Annual Meeting of the American Society of Bone and Mineral Research 12-16 October 2001. (Abstract Published in Journal of Bone and Mineral Research, 16(1): S185, 2001.)

- 10. Papazis J, Doukas WC, <u>Scoville CR</u>: Effects of Post-Operative Drain or No Drain Usage on Effusion, Pain, and Range of Motion After ACL Reconstruction. Fortieth Annual SOMOS Meeting, Vail, CO, 1998.
- 11. Arciero RA, <u>Scoville CR</u>, Hayda RA, Snyder RJ: The Effect of Tourniquet Use in ACL Reconstruction. The American Orthopaedic Society of Sports Medicine Annual Meeting, Toronto, Ontario, Canada, 1995.
- 12. Arciero RA, <u>Scoville CR</u>, Snyder RJ, Uhorchak JM, Taylor DC, Huggard DJ: Single vs. Two-Incision Arthroscopic ACL Reconstruction. Annual Meeting of the Arthroscopy Association of North America, San Francisco, CA, 1995.
- 13. Arciero RA, <u>Scoville CR</u>: Eccentric Strength of Shoulder Rotator Muscles in Overhead Athletes. Society of Military Orthopaedic Surgeons 36th Annual Meeting, Hilton Head, SC, 1994.
- 14. Arciero RA, <u>Scoville CR</u>, Snyder RJ, Uhorchak JM, Taylor DC, Huggard DJ: Endoscopic vs. Two-Incision Arthroscopic ACL Reconstruction. 45th Military Medicine Surgical Conference, Willingen, Germany, 1994.
- 15. Arciero RA, <u>Scoville CR</u>, Snyder RJ, Uhorchak JM, Taylor DC, Huggard DJ: Single vs. Two-Incision Arthroscopic ACL Reconstruction: A Comparison of Techniques. ACL Study Group, Ischgl, 1994.

LECTURES TO RESIDENTS, FELLOWS, SPORTS MEDICINE DEPARTMENT:

- 1. Physical Therapy Management of Low Back Pain Patients. US Army Joint and Soft Tissue Trauma Fellowship Guest Lecture Series, West Point, NY, 1995.
- 2. Shoulder Rehabilitation, Current Concepts Update and Rationale. US Army Joint and Soft Tissue Trauma Fellowship Guest Lecture Series, West Point, NY, 1993.
- 3. Rehabilitation Concepts and Isokinetic Testing. US Army Joint and Soft Tissue Trauma Fellowship Guest Lecture Series, West Point, NY, 1992.

ABSTRACTS:

- Evans R, Sheehan K, Nindl BC, Baker-Fulco CJ, Mello RP, Murphy MM, Wade CE, Scoville CR. Changes in Lumbar Spine Bone Mineral Density of Healthy Men and Women in the Third Decade of Life: A 10-year Longitudinal Study. Journal of Bone and Mineral Research, 16(1): S185, 2001.
- 2. Moore JH, <u>Scoville CR</u>, Ito MA, Frykman PN, Sharp MA. The effect of prolonged sub-zero temperatures on upper limb nerve conduction during artic ocean 2000 expedition. Medicine & Science in Sports & Exercise, 33 (5), May 2001.
- 3. <u>Scoville CR</u>, Arciero RA. End Range Eccentric Antagonist/Concentric Agonist Strength Assessment: A New Perspective in Strength Testing. Journal of Orthopedic & Sports Physical Therapy 21(1):55, Jan 95.
- 4. Pitcher DJ, Fay MJ, <u>Scoville CR</u>. Comparison of Anterior Cruciate Ligament Repair: Arthroscopy and Arthrotomy Perioperative Comparison. Orthopedic Transactions 13(3):590, Fall 89.

PUBLICATIONS:

1. Aldridge Whitehead JM, Wolf EJ, <u>Scoville CR</u>, Wilken JM. Does a microprocessor-controlled prosthetic knee affect stair ascent strategies in

- persons with transfemoral amputation? Clin Orthop Relat Res. 2014 Oct;472(10):3093-101
- 2. Stoneman P, Hooper R, <u>Scoville C</u>. Guest Editorial. Implementing Outcome Measures The PT Perspective. J Rehabil Res Dev. 2013;50(7):xix-xxii.
- Gailey RS, Gaunaurd IA, Raya MA, Roach KE, Linberg AA, Campbell SM, Jayne DM, <u>Scoville CR</u>. The development and reliability testing of the ComprehensiveHigh-level Activity Mobility Predictor (CHAMP) in Service Members with traumatic Lower Limb Loss. J Rehabil Res Dev. 2013;50(7):905-18
- Gailey RS, <u>Scoville C</u>, Gaunaurd IA, Raya MA, Linberg AA, Stoneman PD, Campbell SM, Roach KE. Construct Validity of the Comprehensive High-level Activity Mobility Predictor (CHAMP) for Service Members with Traumatic Lower Limb Loss. Rehabil Res Dev. 2013;50(7):919-30
- Gaunaurd IA, Roach KE, Raya MA, Hooper R, Linberg AA, Laferrier JZ, Campbell SM, <u>Scoville C</u>, Gailey RS Factors related to high-level mobility in male servicemembers with traumatic lower-limb loss. J Rehabil Res Dev. 2013;50(7):969-84
- 6. Stinner DJ, Burns TC, Kirk KL, <u>Scoville CR</u>, Ficke JR, Hsu JR, The Late Amputation Study Team (LAST). Prevalence of late amputations during the current conflicts in Afghanistan and Iraq. Mil Med. 2010 Dec;175(12):1027-9.
- 7. Andersen, R, Davis, S, <u>Scoville C</u>: Rehabilitation of Military Amputees: From Injury to Independence. Orthopedics. 31(10):1000-1002, October 2008.
- 8. <u>Scoville CR</u>: Global War on Terrorism Amputee Epidemiology: 556: 8:55 AM 9:20 AM. Medicine & Science in Sports & Exercise. 38(5) Supplement:79, May 2006.
- Potter BK, <u>Scoville CR</u>: Amputation is not isolated: An Overview of the US Army Amputee Patient Care Program and Associated Amputee Injuries. J Am Acad Orthop Surg. 2006 Oct;14(10):S188-90.
- 10. Polly DW Jr, Kuklo TR, Doukas WC, <u>Scoville C</u>: Advanced Medical Care for Soldiers Injured in Iraq and Afghanistan. Minn Med. 2004 Nov;87(11):42-4.
- 11. Murphy M, Evans R, Nindl B, Sheehan K, Wade C, <u>Scoville C</u>: Longitudinal Relationship Between Physical Activity and Lumbar Bone Density in Men and Women aged 18-29. Medicine & Science in Sports & Exercise. 36(5) Supplement:S290, May 2004
- 12. Uhorchak JM, <u>Scoville CR</u>, Williams GN, Arciero RA, St Pierre P, Taylor DC: Risk factors associated with noncontact injury of the anterior cruciate ligament: a prospective four-year evaluation of 859 West Point cadets. Am J Sports Med. 2003 Nov-Dec;31(6):831-42.
- 13. Murphy MM, Nindl BC, Evans RK, Baker-Fulco CJ, Sheehan KM, Scoville CR: Relationship of IGF-I, Bone Turnover Markers, Diet and Body Composition to Bone Mineral Density. Medicine & Science in Sports & Exercise. 35(5) Supplement 1:S79, May 2003
- 14. Dhawan A, Doukas WC, Papazis JA, <u>Scoville CR</u>: Effect of drain use in the early postoperative period after arthroscopically assisted anterior cruciate ligament reconstruction with bone-patellar tendon-bone graft. Am J Sports Med. 2003 May-Jun;31(3):419-24.
- 15. Evans RK, <u>Scoville CR</u>, Ito MA, Mello RP: Upper Body Fatiguing Exercise and Shooting Performance. Mil Med. 2003 Jun;168(6):451-6.
- Nindl BC, <u>Scoville CR</u>, Sheehan KM, Leone CD, Mello RP. Gender Differences in Regional Body Composition and Somatotrophic Influences of IGF-I and Leptin. The Journal of Applied Physiology 92:1611-1618, 2002.

- 17. Murphy MM, Nindl BC, Schneider GA, Sheehan KM, Evans RK, <u>Scoville CR</u>: Assessment of Bone Health in Men and Women Comparing DXA to Calcaneal Ultrasound. Natick, MA: U.S. Army Research Institute of Environmental Medicine. Technical Report T03-1, November 2002.
- Schneider GA, Senier L, Evans R, <u>Scoville C</u>, Amoroso PJ. Sit-Up Related Injuries Reported to the U.S. Army Safety Center, 1980-1998:A Case Series. Natick, MA: U.S. Army Research Institute of Environmental Medicine. Technical Report T01-15, August 2001.
- Moore JH, <u>Scoville CR</u>, Ito MA, Frykman PN, Sharp MA: The Effect of Prolonged Sub-zero Temperatures on Upper Limb Nerve Conduction during Arctic Ocean 2000 Expedition. Medicine & Science in Sports & Exercise. 33(5) Supplement 1:S105, May 2001.
- 20. Wade CE, Ryan JB, Copley JB, Gildengorn VL, Hunt MM, Swain JH, Brooks DE, Scoville CR, Lindberg JS: Gonadal Steroids and Bone Mineral Density: A Longitudinal Study of Young Adults Undergoing Exercise/Academic Stress. Medicine & Science in Sports & Exercise. 31(5) Supplement:S268, May 1999.
- 21. Gerber JP, Williams GN, Scoville CR, Arciero RA, Taylor DC. Persistent Disability Associated with Ankle Sprains: A Prospective Examination of an Athletic Population. Foot & Ankle International 19(10):653-660, Oct 98. Abstracted in Sports Medicine Reports 1(1):7, premiere issue.
- Scoville CR, Arciero RA, Taylor DC, Stoneman PD. End Range Eccentric Antagonist/Concentric Agonist Strength Ratios: A New Perspective in Shoulder Strength Assessment. Journal of Orthopedic and Sports Physical Therapy 25(3):203-207, Mar 97.
- Arciero RA, <u>Scoville CR</u>, Hayda RA, Snyder RJ. The Effects of Tourniquet Use in Anterior Cruciate Ligament Reconstruction. A Prospective, Randomized Study. The American Journal of Sports Medicine 24(6):758-764, 96.
- 24. Arciero RA, <u>Scoville CR</u>, Snyder RJ, Uhorchak JM, Taylor DC, Huggard DJ. Single Versus Two-Incision Anterior Ligament Reconstruction. Arthroscopy: The Journal of Arthroscopic and Related Surgery 12(4):462-469, Aug 95.
- 25. Halle JS, <u>Scoville CR</u>, Greathouse DG. Ultrasound's Effect on the Conduction Latency of the Superficial Radial Nerve in Man. Journal of the American Physical Therapy Association 61(3):345-350, Mar 81.
- 26. Nitz AJ, <u>Scoville CR</u>. The Use of Ultrasound in Early Detection of Stress Fractures of the Medial Tibial Plateau. Military Medicine 145(12):844-846, Dec 80.

BOOK CHAPTERS:

1. Pasquina PF, Scoville CR, Belnap B, Cooper RA. Introduction: Developing a System of Care for the Combat Amputee, In: Textbooks of Military Medicine. Care of the Combat Amputee. PF Pasquina and RA Cooper ed., Office of the Surgeon General, 1-18, 2009

HONORS AND AWARDS (Military):

Army Legion of Merit Meritorious Service Medal with four Oak Leaf Clusters Army Commendation Medal with three Oak Leaf Clusters Army Achievement Medal with three Oak Leaf Clusters
Army Good Conduct Medal
Army Occupation Medal
National Defense Service Medal with Bronze Star
Humanitarian Service Medal
Armed Forces Reserve Medal
Army Service Ribbon
Overseas Service Ribbon
Army Staff Identification Badge
Order of Military Medical Merit

"A" Proficiency Designator – Military recognition for outstanding qualifications in Physical Therapy and continued demonstration of exceptional professional ability.

"8Z" Proficiency Designator – Military recognition for demonstration of exceptional professional achievement in the design, conduct, and publication of clinically relevant medical research.

HONORS AND AWARDS (Civilian):

2012 Samuel J. Heyman Service to America, National Security and International Affairs, Medal. Presented 14 September 2012 by Partnership for Public Service, 1100 New York Avenue NW, Suite 200 East, Washington, DC, 20005

2010 EP Maxwell J. Schleifer Distinguished Service Award, presented 24 June 2010 by EP (Exceptional Parent) Global Communications, Inc

The American Orthopaedic Society for Sports Medicine Hughston Award, presented June 27, 2004 in Quebec City, Canada for paper titled "Risk Factors Associated with Non-Contact ACL Injury: A Prospective Four-Year Evaluation of 859 West Point Cadets".

The American Orthopaedic Society for Sports Medicine O'Donoghue Award, presented June 30, 2002 in Orlando, FL for paper titled "Risk Factors Associated with Non-Contact ACL Injury: A Prospective Four-Year Evaluation of 859 West Point Cadets".