Historical Perspective

Sports Medicine-Physical Therapy Doctoral Program

"Academic, Research, and Clinical Excellence"



LTC J. Parry Gerber PhD, PT, ATC, SCS







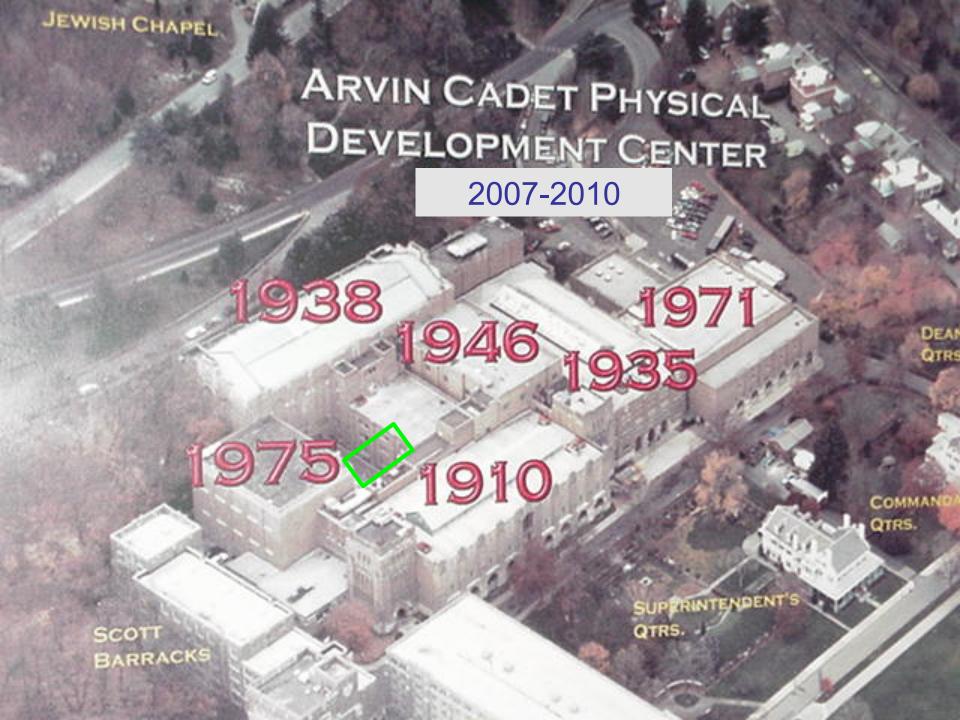






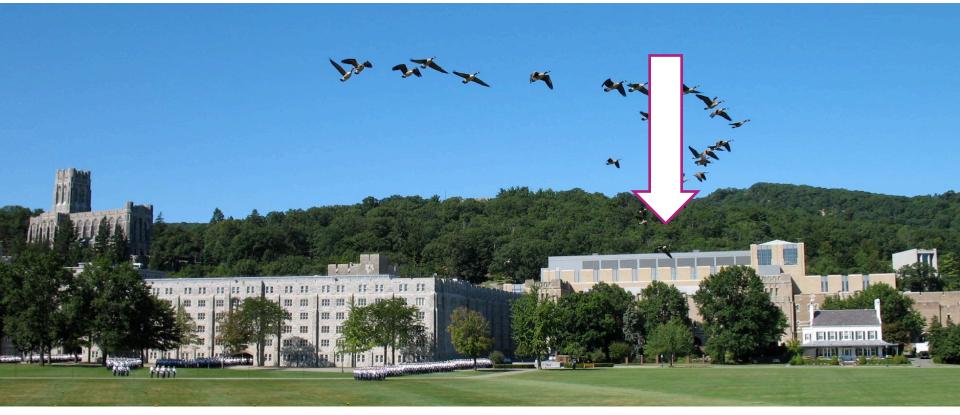


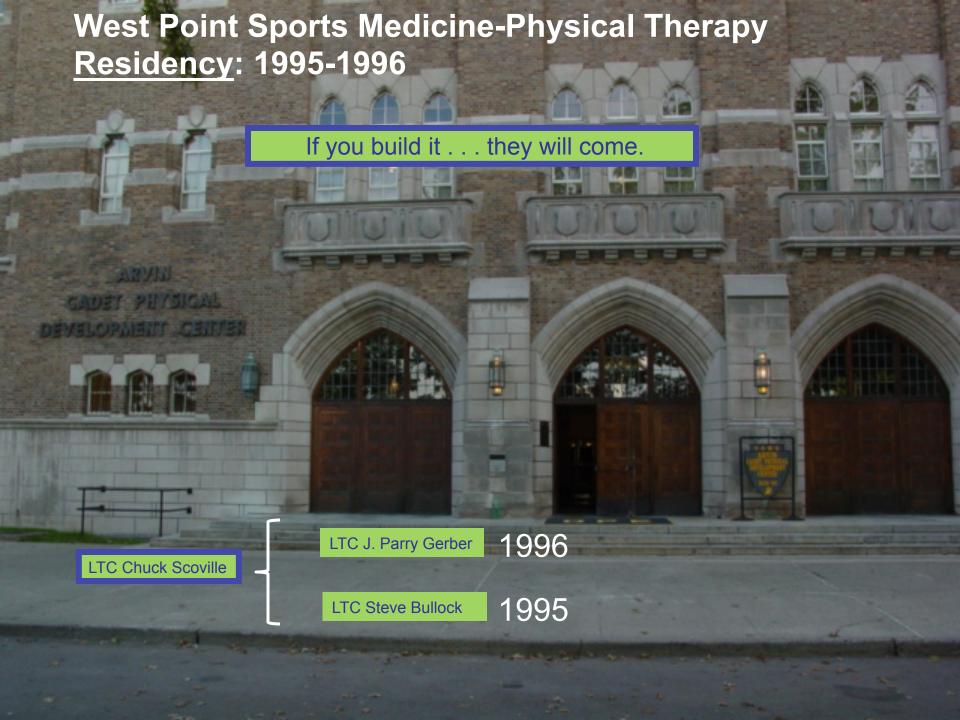








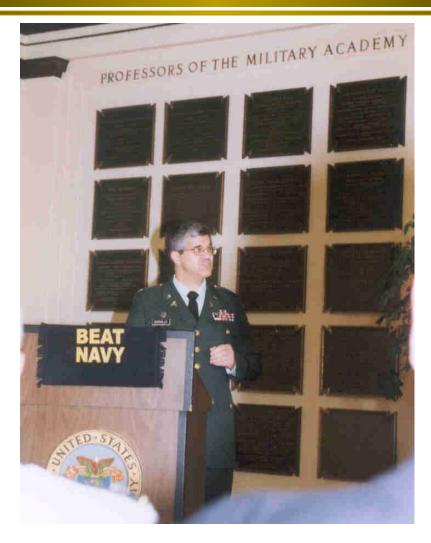












USMA Sports Medicine-Physical Therapy Residency



Chuck Scoville



- Chief of West Point (1992-1996)
- Director of Residency for the 1995 &1996 graduating class
- Got it started
- If you build it . . . they will staff it, fund it, etc.
 No set organization to the residency basically an idea to be developed and refined





- Director: Chuck Scoville
- Resident: Steve Bullock
- Curriculum:
 - Consisted of a huge stack of articles that the director had accumulated over the years. Sections were basically divided into tendon, shoulder, knee and ankle general areas. One of Steve's assignments was to "weed out" articles that didn't have much value for the next year's resident. Classes (or class fragments) were "fit in" during the day's slow times. The format was essentially the instructor and resident sharing what they felt were important points in the article.

Athletic Training:

 Used the Arnheim text as curriculum. Mostly self-taught with a syllabus provided by the Department of Physical Education (DPE) head trainer. Covered intramurals with DPE during the fall from Sep-Apr.





- Director: Chuck Scoville
- Resident: Steve Bullock
- Time:
 - Residents worked normal clinic hours:
 - 0530-1130, 1300-1600: Summer
 - 0630-1130, 1300-1430: School year. (1430-1830 athletic training)
 - No particular times were set aside for research, study, classes.
 The resident would fit those things in whenever possible during "slow" times. He rotated through the weekend inpatient call

and weekend sports coverage.







- Director: Chuck Scoville
- Resident: Parry Gerber



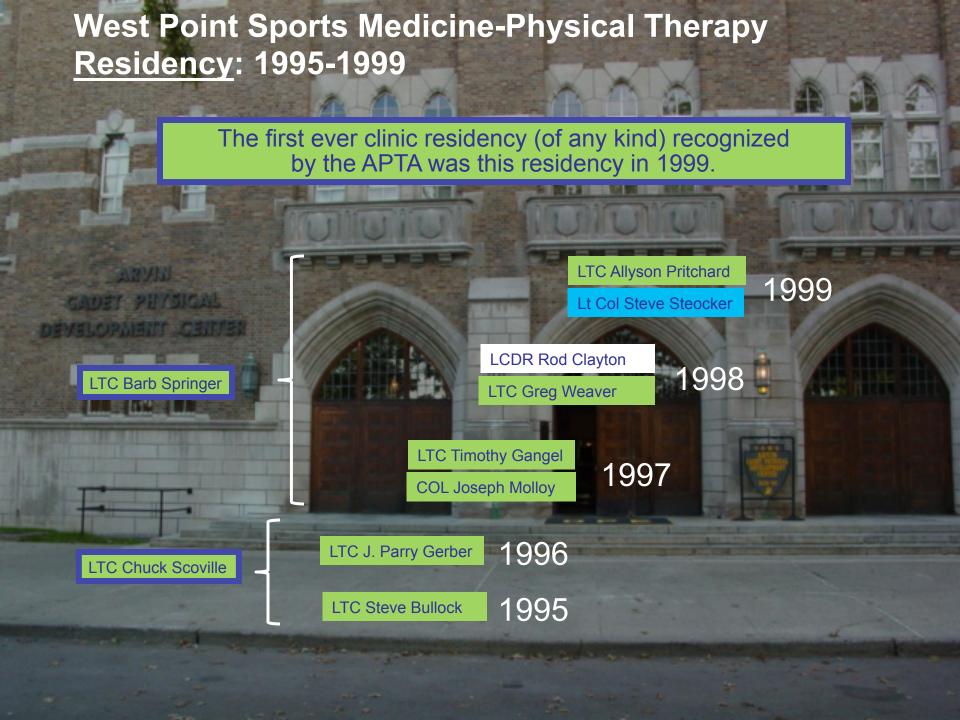
Curriculum:

Similar to the previous year - sections were basically divided into tendon, shoulder, knee and ankle general areas plus an enormous modality section was added. Curriculum consisted of the same huge stack of articles. One of Parry's job was again to "weed out" "insignificant" articles. Classes were again "fit in" where possible with the same format of instruction. After the tendon curriculum, however, very few classes were actually held due to a very busy clinic and an equally very busy chief.

Athletic Training:

- Used the Arnheim text as curriculum. Mostly self-taught with a syllabus provided by the Department of Physical Education (DPE) head trainer. Covered intramurals with DPE during the fall from Sep-Apr. A midterm was given in December, a final exam was given in April.
- * Time: Similar as the previous year

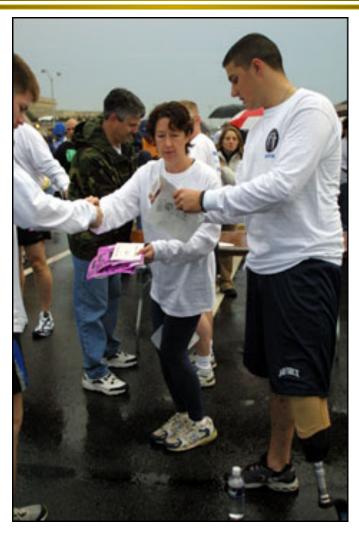












USMA Sports Medicine-Physical Therapy Residency







- Chief of West Point and Director of the Residency (1996-1999)
 - First chief to have a former resident (Parry Gerber) stay as assistant director. Staff therapist Glenn Williams (very research oriented) also remained on staff
- If you organize and promote . . . they will recognize it, staff it, fund it, etc.
 - One of her top priorities was to provide better overall organization and structure to the residency
 - The first ever clinic residency recognized by the APTA was this residency in 1999.





- Director: Barb Springer
- Residents: Joe Molloy & Tim Gangel
- Curriculum:
 - ◆ From the "weeded out" stack of articles, the first written curriculum was created and organized through the combined efforts of Barb Springer, Parry Gerber, and Glenn Williams. Each major section area was subdivided into topics with specific goals attached. Several text book reading assignments were included along with some video tape lectures. Stress fractures and statistics was added to the curriculum. Classes were scheduled from July Mar and held on a regular basis, usually 2-3 days per week lasting for 1-1½ hours. However, it was not infrequent to have a class start late and run into "free" time (for example lunch). It was also not uncommon to have classes postponed due to unforeseen events (i.e., clinic matters, patient care, other).





- Director: Barb Springer
- Residents: Joe Molloy & Tim Gangel
- Athletic Training:
 - ◆ The DPE trainers were given an outline of topics to cover. Each trainer rotated to teach a 1-2 hour class on a weekly basis. Topics were based out of Arnheim's text once again. Classes were organized and well done . . . when they were given. There were many conflicts in schedule from the DPE side of things, and many classes were also canceled due to lack of DPE preparation time (2 of the 3 trainers arrived in July for their first year at West Point). A final exam was given in April.





- Director: Barb Springer
- Residents: Joe Molloy & Tim Gangel
- * Time:
 - We changed the summer hours to 0630 1600 and dropped off Saturday coverage altogether. Residents rotated for Saturday inpatient coverage and morning hospital work every other week for the first half of the year and then both of those rotations were dropped. Every other Friday afternoon was set aside for "Independent Study and Research Time (ISRT)".





- Director: Barb Springer
- Residents: Rod Clayton & Greg Weaver
- Curriculum:
 - ◆ The curriculum followed a similar format from the previous year. To refine the curriculum, residents and faculty would judge the reading assignments as essential or nonessential and revise the curriculum. A section on basic science was added to the curriculum. The modality section was greatly reduced (by about 80%) and included in the basic science curriculum. Class schedule was similar to the previous year. A good improvement was made in starting and ending classes on time. We probably had to postpone class 20% of the time for one reason or another.





- Director: Barb Springer
- Residents: Rod Clayton & Greg Weaver
- Athletic Training:
 - ◆ DPE A better commitment from the head trainer to have a more structured curriculum fell through as the head trainer took a job elsewhere. That left a shortage in DPE staff for several months. Classes went about like the year before. A final exam was given in March, before the SCS exam.





- Director: Barb Springer
- Residents: Rod Clayton & Greg Weaver
- Time:
 - The same summer schedule was kept. Residents rotated one afternoon a week at the hospital plus Friday mornings before ortho rounds to have experience with inpatients. Every other Friday afternoon was still set aside for "Independent Study and Research Time (ISRT)".

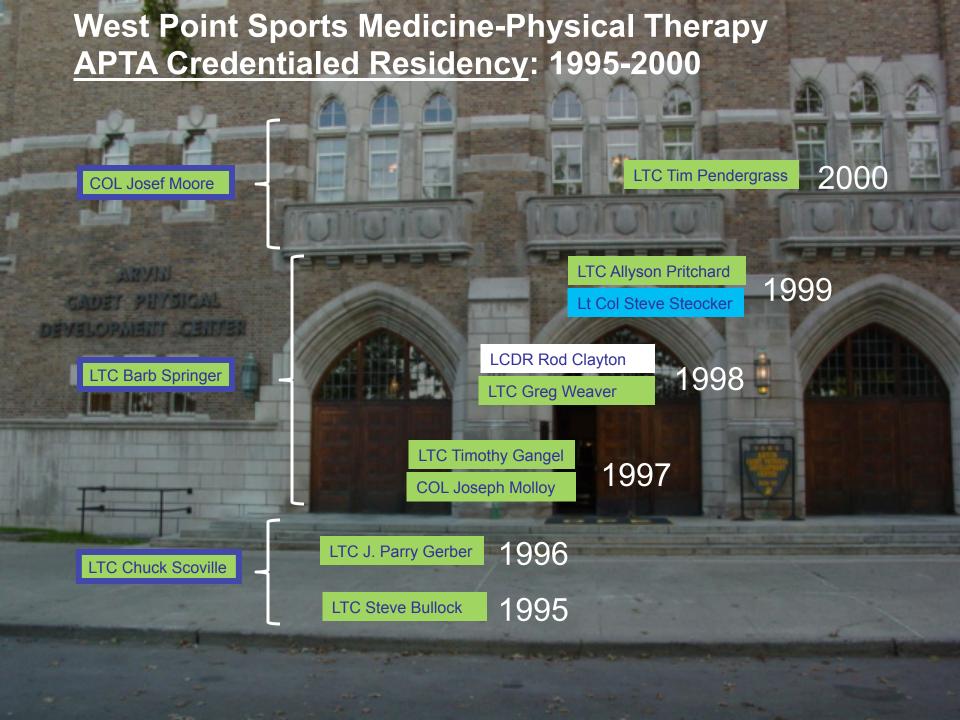




- Director: Barb Springer
- Residents: Allyson Pritchard & Steve Stoecker
- Curriculum, Athletic Training, Time:
 - All similar to the previous year with better overall follow

through.

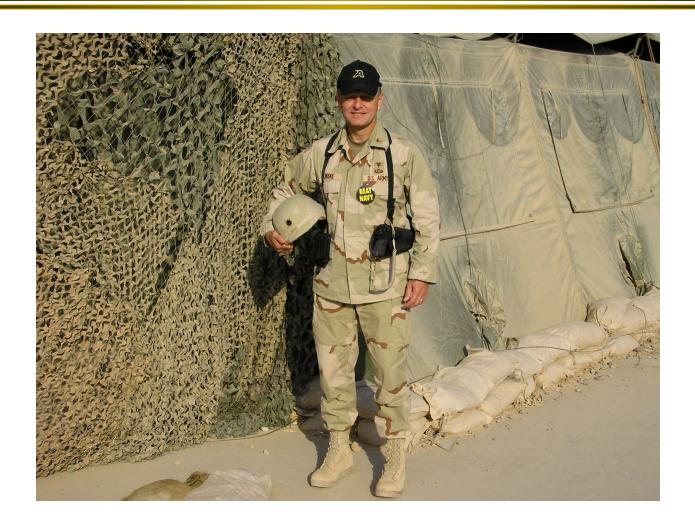










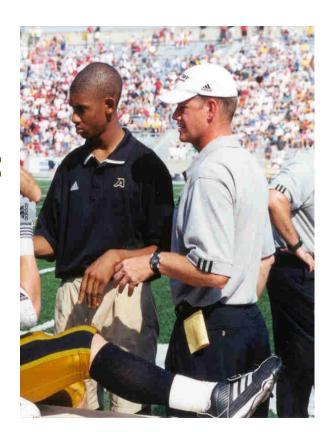


USMA Sports Medicine-Physical Therapy Residency





- Director: Joe Moore
- Resident: Tim Pendergrass
- Curriculum, Athletic Training:
 - Similar to the previous year.







- Director: Joe Moore
- Resident: Tim Pendergrass
- Time:
 - ◆ This was a transition year with the new director (Joe Moore) coming on staff. Essentially, the same overall schedule and organization continued. Tim Pendergrass was the first resident to go through the residency since it became credentialed by the APTA. It appeared that the curriculum for didactic instruction, athletic training activity, and clinical rotations over the previous years did not always match what was written as a part of the overall curriculum or what was experienced by the residents.
 - Secondly, the residency was beginning to be expanded to 18 months, changing to a quad-service program and beginning a revised new academic, clinical, and research curriculum.

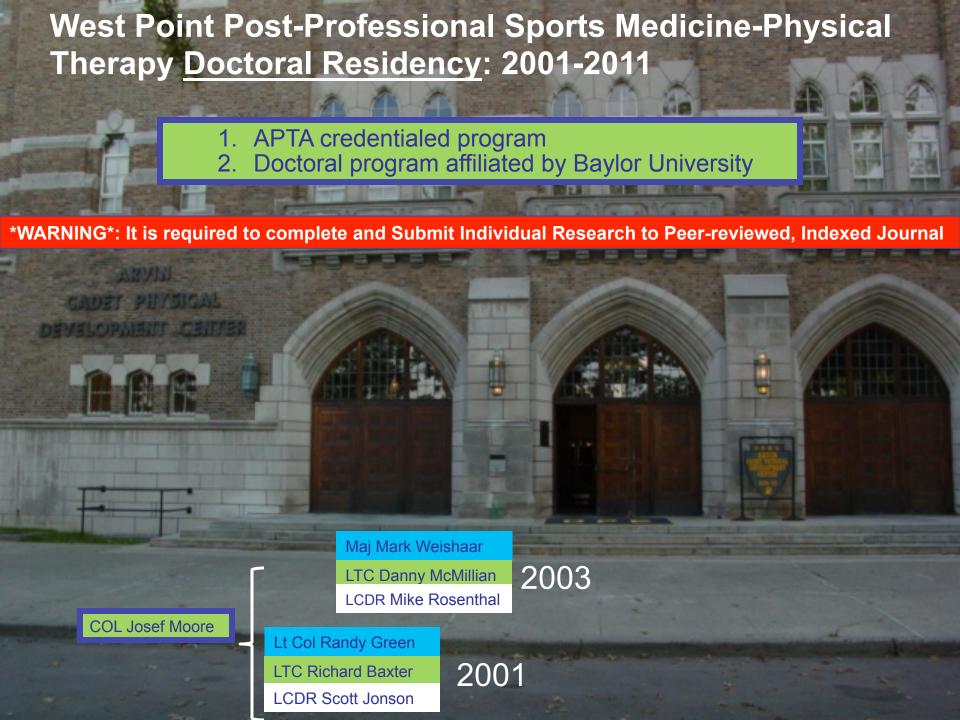


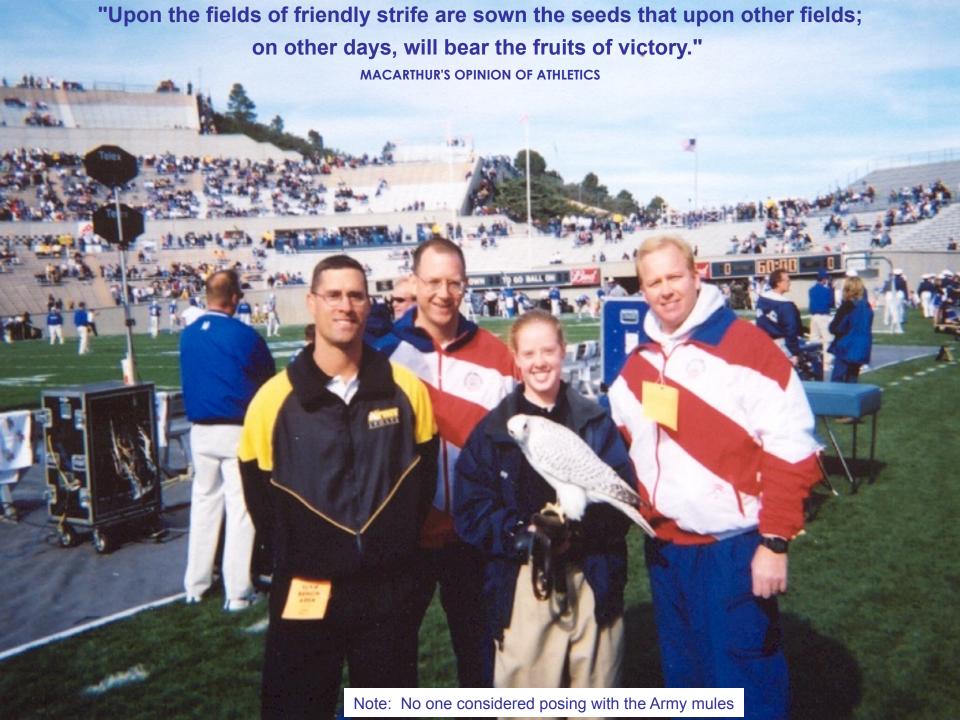
Joe Moore



- Chief of West Point and Director of the Residency (1999-2002)
 - Parry Gerber left in the summer of 2000. Tim Pendergrass (resident 1999-2000) remained on staff as assistant director.
- If you push and persist . . . they will grant a degree.
 - One of his top priorities was to organize the curriculum in a manner consistent with the Baylor model to become a Doctorate of Science degree producing program.
- The sports-medicine physical therapy residency extended to an 18 month program and offered the DSc degree in 2001.













- Director: Joe Moore
- Residents: Randy Green, Mike Johnson, Rich Baxter
- Curriculum/time:
 - Curriculum shortened
 - Class times were in the afternoon during the summer, from 1000-1200 during the fall, and formal classes ended in January to allow residents to concentrate on patient care, research, SCS exam, etc.
 - Ankle, knee and shoulder with a large emphasis on instability was the focus as instability of the ankle, knee and shoulder are West Point's legacy.
 - The curriculum areas followed the APTA guidelines and was geared toward preparing residents for the SCS exam.





- Director: Joe Moore
- Residents:Randy Green, Mike Johnson, Rich Baxter
- Athletic Training:
 - Essentially the same schedule
 - DPE trainers continue to very cooperative and helpful to the residents. But, time is voluntary and the residency is not their primary job – challenges occasionally occur
 - ODIA trainers used more







- Director: Joe Moore and then Paul Stoneman
- Residents: Danny McMillan, Mark Weishaar, Mike Rosenthal
- Curriculum, time, athletic training:
 - First 18 month residency
 - Baylor course curriculum followed
 - Largely, a repeat of previous residency



USMA Sports Medicine-Physical Therapy Residency

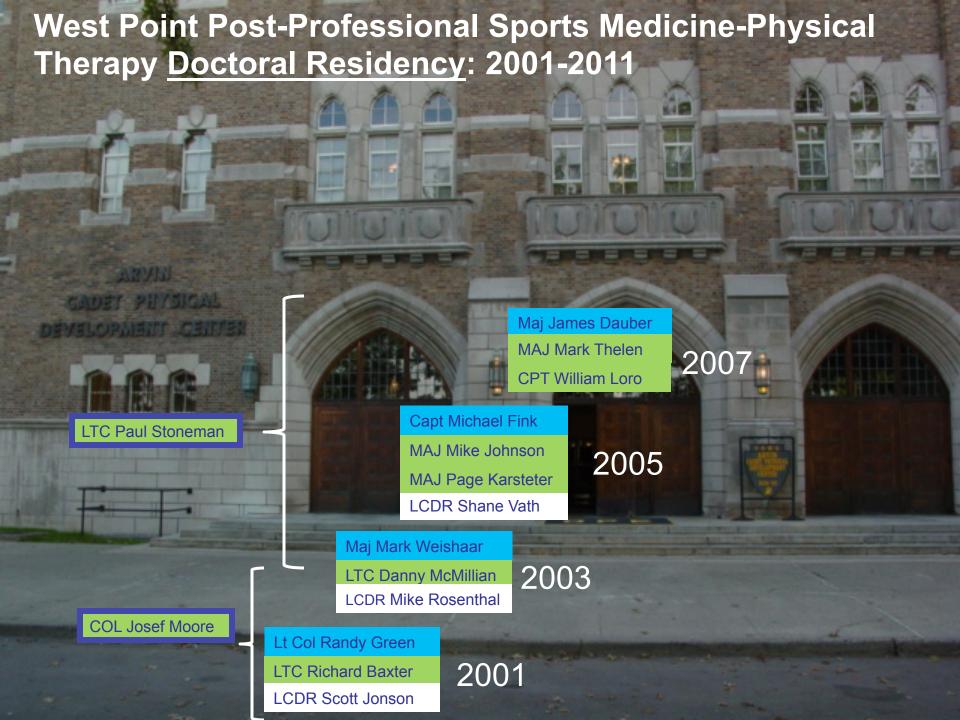




- If Washington \ Were alive TODAY He'd be in the



USMA Sports Medicine-Physical Therapy Residency





















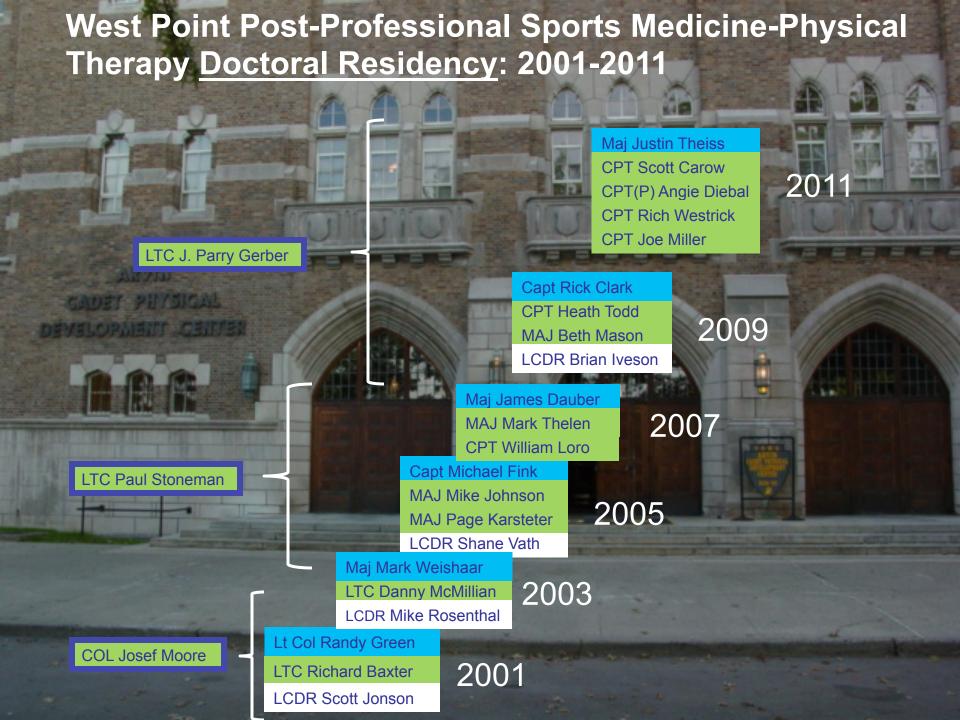
- Director: Paul Stoneman
- Residents: Michael Fink, Michael Johnson, Page Karsteter, Shane Vath
- Curriculum, time, athletic training:
 - Somewhat of a transition period many challenges over the next 4 years
 - Little program continuity existed: no former resident present
 - Significant staffing problems: deployments without backfill, staff members in courses or with medical issues, very limited enlisted staff
 - APTA revamped credentialed residency guidelines no longer accepted the Baylor curriculum
 - Switched to a new physical therapy clinic with a dedicated conference room and offices





- Director: Paul Stoneman
- Residents: Bill Loro, James Dauber, Mark Thelen
- Curriculum, time, athletic training:
 - Due to the aforementioned challenges, many issues of the past slowed progress. The Director was pulled in so many directions that he couldn't dedicate himself as much as he wanted to the residency.











- Director: Parry Gerber
- Residents: Heath Todd, Beth Mason, Brian Iveson, Richard Clark













- Director: Parry Gerber
- Residents: Heath Todd, Beth Mason, Brian Iveson, Richard Clark
- Another transition time:
 - Recredentialing the residency was not a trivial task. Many required items had to be added or modified to meet national APTA standards.
 - There was concern from Baylor that consistency may be lacking between residencies and especially when there was a change in Directors.
 - These 2 factors caused significant restructuring.





- Director: Parry Gerber
- Residents: Heath Todd, Beth Mason, Brian Iveson, Richard Clark
- Curriculum, time, athletic training:
 - The Director assigned a clinic chief at both the Keller and Cadet Clinic to handle all clinical matters to dedicate time more exclusively to the residency.
 - Administrative details from the APTA and Baylor took significant time away from directly focusing on the residency
 - Much more structured school setting.
 - Athletic training the DPE staff developed a more standardized curriculum

West Point Post-Professional Sports Medicine-Physical Therapy Doctoral Residency

Example of research projects/publications from former graduates:

Side to Side Anthropometric Ultrasound Measurements of Lateral Abdominal Musculature; a Study of Competitive Collegiate Single Sided Rowers, Beth Mason

Associations between three clinical assessment tools for postural stability, Rick Clark

Interrater reliability of the Side-lying Thoraco-lumbar Rotation Measurement (STRM), Brian Iveson

The Effects of Cryotherapy on Quadriceps Activity and Isometric Strength in Early Post-Operative Knee Surgery Patients, Loro W.

Foot Plantar Surface Pressure Patterns and Incidence of Lower Extremity Overuse Injuries in West Point New Cadets, Heath Todd

Use of a Modified Version of the Balance Error Scoring System (BESS) to Predict Ankle Sprains in a Military Population, Dauber J

The Swain Test for Medial Collateral Ligament Injuries of the Knee Karsteter PA, Stoneman PD, McCulloh I.

The Clinical Efficacy of Kinesio Tape for Shoulder Pain: A Randomized, Double-Blinded, Clinical Trial.

Clinical Prediction Rules for Chronic Exertional Compartment Syndrome. Vath SA.

The Effects of an Acute Bout of Pre-Activity Static Stretching versus Ballistic Stretching on Hamstring Muscle Length and Horizontal Hopping Performance in Athletic Male Cadets with Hamstring Tightness Fink ML, Stoneman PD.

Comparison of Lateral Hop Versus a Forward Hop for Functional Evaluation of Lateral Ankle Sprains. Johnson

The effect of functional training on chronic ankle instability. McMillian D, Moore JH, Stoneman PA

Effect of prophylactic knee bracing on functional test performance in NCAA Div I football interior linemen. Rosenthal MD, Moore JH,

Supervised Clinic-based Physical Therapy versus Home Exercise in the Treatment of Acute Lateral Ankle Sprains. Weishaar MD, Green RA, Moore JH, Pendergrass TLSilvka E, Goss DL, Stoneman P 2004 Sports Physical Therapy Section Excellence in Research Award

Sit-up performance associated with two different training regimens. Baxter RE, Moore JH, Pendergrass TL, Crowder TA, Lynch S.

Prospective double blinded comparison of supervised exercise with and without manual therapy for patients with acute lateral ankle sprains. Green RA, Moore JH, Pendergrass TL, Lynch SM, Vought RM. Louise House Award for best poster at SOMOS.

Training and lower extremity biomechanical risk factors associated with metatarsal stress fractures in army cadets at the united states military academy. Jonson SR, Moore JH, Pendergrass TL, Taylor DC, Cameron KL, Fellows DW.

Surgeons, and Nonorthopaedic Providers Josef H. Moore, Donald Lee Goss, Richard E. Baxter, Thomas M. DeBerardino, Liem T. FEBRUARY 2005 Volume 35, No. 2 Risk Determination for Patients With Direct Access to Physical Therapy in Military Health Care Facilities Josef H. Moore, Danny J. McMillian, Marc D. Weishaar, Michael D. Rosenthal OCTOBER 2005 Volume 35, No. 10

Recipient of the 2003 Sports Physical Therapy Section Excellence in Research Award: Clinical Diagnostic

Accuracy and Magnetic Resonance Imaging of Patients Referred by Physical Therapists, Orthopaedic

Deep Vein Thrombosis in an Athletic Military Cadet. J Orthop Sports Phys Ther. 2006;36(9):686-697. doi:10.2519/jospt.2006.2251 Fink ML, Stoneman

Bilateral Distal Fibular Stress Fractures in a Young Military Cadet. Fink ML.

Identification and Management of 2 Femoral Shaft Stress Injuries Marc D. Weishaar, Danny J. McMillian, Josef H. Moore JOSPT OCTOBER 2005 Volume 35. No. 10

Karsteter PA, Yunker C. Recognition and Management of an Orbital Blowout Fracture in in Amateur Boxer. J Orthop Sports Phys Ther. 2006;36(8):611-618. doi:10.2519/jospt.2006.2207

Clonus in a Rugby Player and Return to Sports after Transient Neurological Injury. Karsteter PA, Stoneman PD.

Evaluation of a Subscapularis tear in a Female Athlete with Shoulder Instability. Johnson M.

Diagnosis and Treatment of Acute Exertional Rhabdomyolysis Richard E. Baxter, Josef H. Moore JOSPT MARCH 2003 Volume 33, No. 3 Resident's Case Problem: Identification of a Fibular Fracture in an Intercollegiate Football Player in a

Physical Therapy Setting Donald Lee Goss, Josef H. Moore, Darryl B. Thomas, Thomas M. DeBerardino JOSPT APRIL 2004 Volume 34, No. 4

Unilateral hypoglossal nerve injury in a college wrestler: A case report. Loro WA, Owens BD. (in publication with J Athl Trng)

Diagnosis of Medial Knee Pain: Atypical Stress Fracture About the Knee Joint Josef H. Moore, Thomas M. DeBerardino, Michael D. Rosenthal JULY 2006 Volume 36, No. 7

Dynamic vs. static-stretching warm up: the effect on power and agility performance. McMillian DJ, Moore JH, Hatler BS,

Taylor DC. J Strength Cond Res. 2006 Aug;20(3):492-9.

Differential diagnosis of shoulder pain followed by progressive weakness. A case report. Rosenthal M. Journal of

Special Operations Medicine. Accepted for publication Neuromuscular excitability changes in the vastus medialis following anterior cruciate ligament

reconstruction. Rosenthal M. Electromyography and Clinical Neurophysiology. 49(1):43-51, 2009.

Acute painless shoulder weakness during high-intensity athletic training. Rosenthal M. American Journal of Sports Medicine. 37(1): 175-180, 2009.

Hypothenar Hammer Syndrome: case report with clinical and infrared thermographic correlations. Molloy JM, Pascoe DD, Smith JW, Purohit RC, Herrick RT. *Thermology International.* 2005; 15 (2).

Effects of early progressive eccentric exercise on muscle structure after anterior cruciate ligament reconstruction. Gerber JP, Marcus RL, Dibble LE, Greis PE, Burks RT, LaStayo PC J Bone Joint Surg Am. 2007 Mar;89(3):559-70.

Safety, feasibility, and efficacy of negative work exercise via eccentric muscle activity following anterior cruciate ligament reconstruction. Gerber JP, Marcus RL, Dibble LE, Greis PE, Burks RT, LaStayo PC. J Orthop Sports Phys Ther. 2007 Jan; 37(1):10-8.

Postural control after a 2-mile run. Pendergrass TL, Moore JH, Gerber JP: Mil Med. 2003 Nov; 168(11):896-903.

Early Application of Negative Work via Eccentric Ergometry Following Anterior Cruciate Ligament Reconstruction: A Case Report. Gerber JP, Marcus RL, Dibble LE, Greis P, LaStayo PC. J Orthop Sports Phys Ther. 2006 May;36(5): 298-307.

High-intensity resistance training amplifies muscle hypertrophy and functional gains in persons with Parkinson's disease. Dibble LE, Hale TF, Marcus RL, Droge J, Gerber JP, LaStayo PC. *Mov Disord.* 2006 Sep: 21(9):1444-52.

Comparison of the Single Assessment Numeric Evaluation method and two shoulder rating scales.

Outcomes measures after shoulder surgery. Williams GN, Gangel TJ, Arciero RA, Uhorchak JM, Taylor DC. Am J Sports Med. 1999
Mar-Apr;27(2):214-21.

Evaluation of the sports ankle rating system in young, athletic individuals with acute lateral ankle sprains. Williams GN, Molloy JM, DeBerardino TM, Arciero RA, and Taylor DC: Foot & Ankle International, 2003; 24(3).

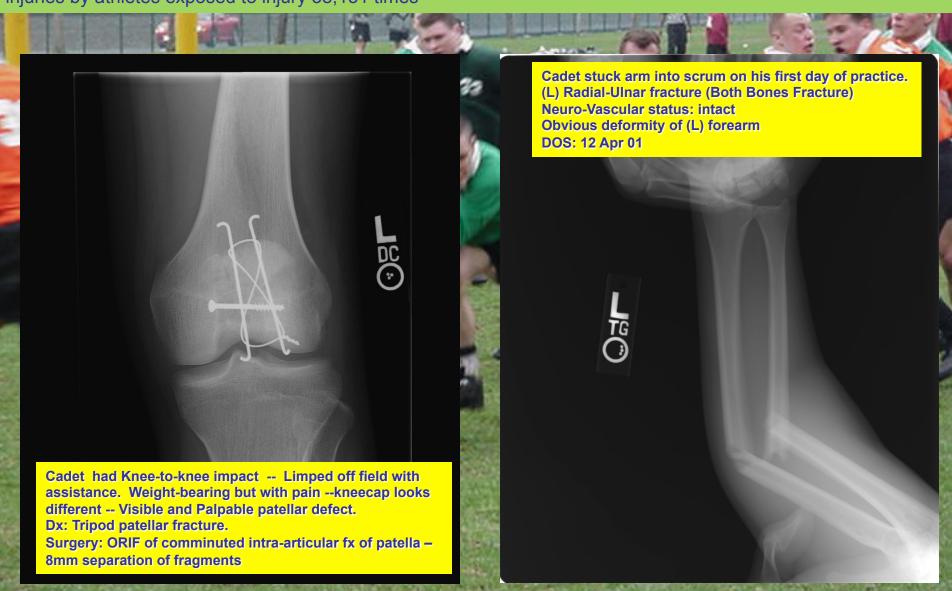
Comparison of the single assessment numeric evaluation method and the Lysholm score. Williams GN, Taylor DC, Gangel TJ, Uhorchak JM, Arciero RA. *Clin Orthop Relat Res.* 2000 Apr;(373):184-92.

Persistent Disability Associated with Ankle Sprains: A Prospective Examination of an Athletic Population. Gerber JP, Williams GN, Scoville CR, Arciero RA, Taylor DC. Foot & Ankle International, 1998 Oct;19(10):653-660.

Influence of Running Shoe Type on Distribution and Magnitude of Plantar Pressures among Those with Pes Planus or Pes Cavus Feet. Molloy JM, Yeykal NS, Tragord BS, Neal MS, Nelson ES, Christie DS, Teyhen DS, McPoil TM *Clin Biomech* 2008; 23(5): 708-709.

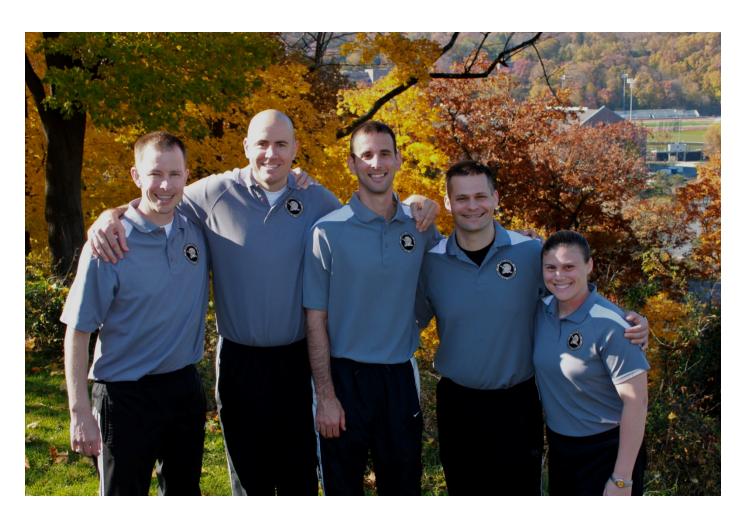
Relative Risk of Injury Associated with Participation in Intramural Rugby at the United States Military Academy. Cameron KL, Yunker CA, Koesterer AC. Journal of Athletic Training, Vol. 36(S), May 2001.

Incidence of injury: 22.31 injuries per 100 players or 15.86 injuries per 1000 exposures to injury. Overall 605 injuries by athletes exposed to injury 38,151 times









USMA Sports Medicine-Physical Therapy Residency





- Director: Parry Gerber
- Residents: Scott Carow, Angie Diebal, Rich Westrick, Joe Miller, Justin Theiss
- Quite possibly the most productive of any previous group
 - > 10 journal articles/chapters published
 - Many notable athletic training venue coverages warrior games, World Games in Brazil, Army 10-miler, All-Army Basketball, etc.

West Point

US Military-Baylor Sports-Medicine Residency and Doctoral Program

Publications: May 2011-May 2012

ORIGINAL RESEARCH
EXPLORATION OF THE Y-BALANCE TEST FOR
ASSESSMENT OF UPPER QUARTER CLOSED KINETIC
CHAIN PERFORMANCE

Richard B. Westrick, PT, DPT, DSc, OCS, SCS¹ Joseph M. Miller, PT, DPT, DSc, OCS, SCS² Scott D. Carow, PT, DPT, DSc, OCS³ J. Parry Gerber, PT, PhD, SCS, ATC⁴

ORIGINAL RESEARCH

LATERAL ABDOMINAL MUSCLE SYMMETRY IN COLLEGIATE SINGLE-SIDED ROWERS

Norman W. Gill, PT, D.Sc., OCS, FAAOMPT¹ Beth E. Mason, PT, D.Sc., OCS² J. Parry Gerber, PT, Ph.D., ATC, SCS³

CASE REPORT

DIAGNOSIS OF AN ISOLATED POSTERIOR MALLEOLAR FRACTURE IN A YOUNG FEMALE MILITARY CADET: A RESIDENT CASE REPORT

Joseph M. Miller, PT, DSc, OCS, SCS, CSCS¹ Steven J. Svoboda, MD² J. Parry Gerber, PT, PhD, SCS, ATC³

ORIGINAL RESEARCH

EFFECTS OF FOREFOOT RUNNING ON CHRONIC EXERTIONAL COMPARTMENT SYNDROME: A CASE SERIES

MAJ Angela R. Diebal, PT, DPT¹ Dr. Robert Gregory, PhD² COL Curtis Alitz, MD³ LTC J. Parry Gerber, PT, PhD^{1,4} Forefoot Running Improves Pain and Disability Associated With Chronic Exertional Compartment Syndrome

MAJ Angela R. Diebal,*† PT, DSc, Robert Gregory,‡ PhD, COL Curtis Alitz,† MD, and COL J. Parry Gerber,† PT, PhD

Investigation performed at Keller Army Community Hospital, West Point, New York

Dorsal Triquetrum Fracture

RICHARD B. WESTRICK, PT, DPT, DSc, OCS, SCS, Physical Therapist, Keller Army Community Hospital, West Point, NY.

ANGELA R. DIEBAL, PT, DPT, DSc, OCS, SCS, ATC, Physical Therapist, Fort Belvoir Community Hospital, Fort Belvoir, VA.

J. PARRY GERBER, PT, PhD, SCS, Director, US Army-Baylor University Post-professional

Sports Medicine – Physical Therapy Doctoral Residency, West Point, NY.

Posterior Distal Tibial Fracture in a Military Trainee

JOSEPH MILLER, PT, DPT, OCS, CSCS, Resident/Doctoral Candidate, US Military-Baylor Sports Medicine Physical Therapy Doctoral Program,
United States Military Academy, West Point, NY.

J. PARRY GERBER, PT, PhD, SCS, ATC, Associate Professor, Baylor University, Waco, TX; Director, US Military-Baylor Sports Medicine

Deep Vein Thrombosis in a Young Marathon Athlete

JUSTIN L. THEISS, PT, DPT, CSCS1 • MICHAEL L. FINK, PT, DSc, SCS, OCS2 • JOHN P. GERBER, PT, PhD, SCS, ATC3



U.S. Military- Baylor University
Post-professional Sports Medicine- PT Doctoral Program
West Point. New York







Director: Mike Johnson

Residents: Scott Dembowski, Nate Shepard,

Mike Garrison







- Director: Don Goss
- Residents: Jeff Dolbeer, Jamie Morris, John Mason, Aspen Heger

