

CURRICULUM VITAE

Michael D. Rosenthal, PT, DSc, SCS, ECS, ATC, CSCS
School of Exercise and Nutritional Sciences
Doctor of Physical Therapy Program
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-7251
(619) 594-2425
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Education:

Baylor University
Keller Army Community Hospital
United States Military Academy
West Point, NY
6/02-12/03
Physical Therapy-Sports Medicine Residency
Doctorate of Science degree

Baylor University
Fort Sam Houston
San Antonio, TX
12/91-6/93
Physical Therapy
Masters degree

Doane College
Crete, NE
1/88-5/91
Natural Sciences
Bachelor's degree

Bethany College
Lindsborg, KS
8/87-12/87
Pre-med

Licensure Information/Registration Number:

Physical Therapy – California (#PT291465)	2016 - present
Physical Therapy - Virginia (#004621)	1993 – present
National Strength and Conditioning Association Board of Certification (#954270)	1995 – present
National Athletic Trainers Association Board of Certification (#049702632)	1997 –present
ABPTS Board Certified Clinical Specialist in Sports PT (#2675)-recertified 5/18/2009; expires 6/1/2019	1999 – present

ABPTS Board Certified Clinical Specialist in Clinical
Electrophysiology (#4852)-recertified 5/21/2012, expires 6/30/2022

2002 – present

Employment and Positions Held (past 10 yrs):

Assistant Professor
Doctor of Physical Therapy Program
San Diego State University
San Diego, CA
8/16 to present

Teaching responsibilities: Lead instructor for *DPT 820: Musculoskeletal Therapeutics I, DPT 821: Musculoskeletal Therapeutics II, and DPT 880: Differential Diagnosis for Physical Therapists.*

Guest lecturer/lab assistant: *DPT 780: Therapeutic Modalities, DPT 782: Therapeutic Exercise, DPT 822: Musculoskeletal Therapeutics III, and DPT 868: Physical Therapy Organization and Administration.*

Physical Therapist-PhyAmerica Government Services Contractor
Anesthesiology Department—Pain Management Clinic
Functional Restoration Pain Program
Naval Medical Center
San Diego, CA
3/16-8/16

Director, Physical Therapy-Occupational Therapy-Chiropractic and Sports Medicine Clinics
Naval Medical Center
San Diego, CA
3/10 to 8/13 and 5/14 to 12/15

Research Director
Extremity Trauma and Amputee Centers of Excellence (EACE)
Naval Medical Center San Diego Facility Representative
8/12 to 11/15

Faculty
Military Musculoskeletal Physical Therapy Residency
Fort Sam Houston
San Antonio, TX
2014

Assistant Director, Physical Therapy-Occupational Therapy-Chiropractic and Sports Medicine Clinics
Naval Medical Center
San Diego, CA
9/13 to 4/14

Associate Faculty
San Diego State University
San Diego, CA
2013 to 2016

Faculty
Sports Physical Therapy Residency
Evidence in Motion

2011 to present

Associate Professor

Non-tenure

Rocky Mountain University of the Health Professions

Provo, UT

2005 to 2013

Director, Physical Therapy

SEAL Delivery Vehicle Team 1

Pearl City, HI

2/07 to 2/10

Peer Reviewed Publications:

1. Rauh MJ, Tenforde AS, Barrack MT, **Rosenthal MD**, Nichols JF. The relationship between sports specialization to injury and menstrual function among high school runners. *Athletic Training and Sports Healthcare*. (in review)
2. Loro W, **Rosenthal MD**, Ross M. The effects of cryotherapy on quadriceps electromyographic activity and isometric strength in patients in the early phases following knee surgery. *J. Orthop Surg*. (in review)
3. Baker R, Souza R, Powers C, Rauh M, Fredericson M, **Rosenthal MD**. Differences in knee and hip adduction and hip muscle activation in runners with and without iliotibial band syndrome. *PM R* 2018; Apr 26. Pii: S1934-1482(18)30215-6.doi: 10.1016/j.pmrj.2018.04.004. [Epub ahead of print].
4. **Rosenthal MD**, Bush M, Ziemke G, Halfpap JP. Navy Physical Therapy services while assigned to aircraft carriers: a review of the first decade. *Mil Med*. 2018; Apr 25. Doi: 10.1093/milmed/usy070. [Epub ahead of print].
5. Halfpap JP, Cho AA, **Rosenthal MD**. Cervical Fracture with Vertebral Artery Dissection. *Journal of Orthopaedic and Sports Physical Therapy*. 2016; 46(10): 929.
6. Sperier A, Hammel N, **Rosenthal MD**. Chondrosarcoma of the hip. *Musculoskeletal Imaging. Journal of Orthopaedic and Sports Physical Therapy*. 2015; 45(10): 814.
7. Green BN, Browske KM, **Rosenthal MD**. Elongated Styloid Processes and Calcified Stylohyoid Ligaments in a Patient With Neck Pain: Implications for Manual Therapy Practice. *Journal of Chiropractic Medicine* 2014;13(2):128-133.
8. Freedman SR, Brody LT, **Rosenthal M**, Wise JC. Short-term effects of patellar kinesio taping on pain and hop function in patients with patellofemoral pain syndrome. *Sports Health* 2014; 6(4):294-300
9. Rainey CE, Taysom DA, **Rosenthal MD**. Upper extremity deep vein thrombosis. *Musculoskeletal Imaging. Journal of Orthopaedic and Sports Physical Therapy* 44(4):313, 2014
10. Rainey CE, Taysom DA, **Rosenthal MD**. Snapping hamstring syndrome. *Musculoskeletal Imaging. Journal of Orthopaedic and Sports Physical Therapy*. 44(1):44, 2014
11. Worms R, Tognoni A, Rainey C, **Rosenthal MD**. Evaluation and management of posterior cruciate ligament injuries. *Physical Therapy in Sport*. 13(4):196-208, 2012
12. Green B, Johnson C, Egan J, **Rosenthal MD**, Evans W. Methicillin-Resistant *Staphylococcus aureus*: an overview for manual therapists. *Journal of Chiropractic Medicine* 11:64-76, 2012
13. **Rosenthal MD**, Provencher MT. Acute bony Bankart lesion and surgical fixation. *Musculoskeletal Imaging. Journal of Orthopaedic and Sports Physical Therapy*. 9(10):765, 2009
14. **Rosenthal MD**. Differential diagnosis of shoulder pain followed by progressive weakness. A case report. *Journal of Special Operations Medicine*. 9(1):16-19, 2009
15. **Rosenthal MD**, Moore JH, Stoneman PD, DeBerardino TM. Neuromuscular excitability changes in the vastus medialis following anterior cruciate ligament reconstruction. *Electromyography and Clinical Neurophysiology* 49(1):43-51, 2009

16. Vachon T, **Rosenthal M**, Dewing CB, Solomon DJ, Shin AY, Provencher MT. Acute painless shoulder weakness during high-intensity athletic training. *American Journal of Sports Medicine* 37(1):175-180, 2009
17. **Rosenthal MD**. Clinical testing for extra-articular lateral knee pain. Modification of traditional tests. *North American Journal of Sports Physical Therapy* 3(2):107-109, 2008
18. **Rosenthal MD**, Moore JH, DeBerardino TM. Diagnosis of medial knee pain: atypical stress fracture about the knee joint. *Journal of Orthopaedic and Sports Physical Therapy* 36(7):526-534, 2006
19. Moore JH, McMillian DJ, **Rosenthal MD**, Weishaar MD. Risk determination for patients with direct access to physical therapy in military health care facilities. *Journal of Orthopaedic and Sports Physical Therapy* 35(10):674-678, 2005
20. **Rosenthal MD**, McMillian DJ. Hamstring-Strain Rehabilitation: A Functional Stepwise Approach for Return to Sports, Part II. *Athletic Therapy Today* 9(1):44-45, 2004
21. **Rosenthal MD**, McMillian DJ. Hamstring-Strain Rehabilitation: A Functional Stepwise Approach for Return to Sports, Part I. *Athletic Therapy Today* 8(6):34-35, 2003
22. **Rosenthal MD**. Shoulder Savers: Alterations of Traditional Exercises. *Strength and Conditioning*. 19(2):7-10, 1997
23. **Rosenthal MD**, Schmitz F, Baer LL, Griffith P, Quillen WS. Comparability of Work Output Measures as Determined by Isokinetic Dynamometry and a Closed Kinetic Chain Exercise. *Journal of Sport Rehabilitation* 3:218-227, 1994

Peer Reviewed Scientific and Professional Presentations: (PL=Platform, PO=Poster)

1. Nalbandian S, Lovell B, Medicke ML, Bancells K, **Rosenthal MD**, Gombatto S. Insufficient flexion movement pattern associated with patellar tendinopathy and low back pain in NCAA Division I men's basketball players, a case series. 2018 Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA. (PO)
2. Baker R, Souza R, Powers C, Rauh M, Fredericson M, **Rosenthal M**. Differences in knee and hip adduction and hip muscle activation in runners with and without iliotibial band syndrome. 2017 Combined Sections Meeting, American Physical Therapy Association, New Orleans, CA. (PO)
3. Halfpap JH, **Rosenthal MD**, Tognoni A, Worms R. Optimizing clinical efficiency and improving patient outcomes: Direct access by many styles. 2016 Combined Sections Meeting, American Physical Therapy Association, Anaheim, CA. (PL)
4. McKnight JS, Beachy G, Adamian A, Blair DM, Hooper JK, **Rosenthal MD**, Goble DJ, Rauh MJ. Injury incidence among interscholastic baseball players. 2014 Combined Sections Meeting, American Physical Therapy Association, Las Vegas, NV. (PO)
5. **Rosenthal MD**, Cowan J. The utility of clinical tests in the evaluation of tibial stress fractures. American Physical Therapy Association. National Conference. San Antonio, TX. June 2008. (PL)
6. Vachon T, **Rosenthal MD**, Provencher MT. Acute shoulder girdle weakness from intensive overhead exercise: a case series. American College of Sports Medicine. Annual Meeting. Denver, CO. June 2008. (PL)
4. **Rosenthal MD**. Femoroacetabular impingement. Complicated patient review. American Physical Therapy Association. Combined Sections Meeting. San Diego, CA. February 2006. (PL)
5. **Rosenthal MD**. Atypical heel pain, bilateral calcaneal stress fractures. American Physical Therapy Association. Combined Sections Meeting. New Orleans, LA. February 2005. (PL)
6. **Rosenthal MD**. Cumulative trauma about the foot and ankle. Complicated patient review. American Physical Therapy Association. Combined Sections Meeting. New Orleans, LA. February 2005. (PL)
7. **Rosenthal MD**, Moore JH, Stoneman PD, DeBerardino TM. The effect of anterior cruciate ligament reconstruction on the Femoral nerve H-reflex. American Physical Therapy Association. Combined Sections Meeting. Nashville, TX. February 2004. (PL)

8. **Rosenthal MD**, Moore JH, DeBerardino TM. Atypical Knee Pain. American College of Sports Medicine, Annual Meeting, San Francisco, CA. May 2003 (PL)
9. **Rosenthal MD**. Ulnar Neuropathy at the Elbow as the Primary Manifestation of Hereditary Neuropathy with Liability to Pressure Palsies (HNPP). American Physical Therapy Association Combined Sections Meeting, Tampa, FL. February 2003. (PL)
10. **Rosenthal MD**. EMG/NCS Utilization in Identifying a Lumbosacral Plexopathy. American Physical Therapy Association Combined Sections Meeting. Boston, MA. February 2002. (PL)

Abstracts:

1. Nalbandian S, Lovell B, Medicke ML, Bancells K, **Rosenthal MD**, Gombatto S. Insufficient flexion movement pattern associated with patellar tendinopathy and low back pain in NCAA Division I men's basketball players, a case series. *J Orthop Sports Phys Ther* 2018;48(1):A249-A250.
2. Baker R, Souza R, Powers C, Rauh M, Fredericson M, **Rosenthal M**. Differences in knee and hip adduction and hip muscle activation in runners with and without iliotibial band syndrome. *J Orthop Sports Phys Ther* 2018;48(1):A74.
3. McKnight JS, Beachy G, Adamian A, Blair DM, Hooper JK, **Rosenthal MD**, Goble DJ, Rauh MJ. Injury incidence among interscholastic baseball players. *J Orthop Sports Phys Ther* 2014;44(1):A171-172.
4. **Rosenthal MD**, Vachon T, Dewing CB, Solomon D, Shin AY, Provencher MT. Acute shoulder girdle weakness from intensive overhead exercise: a case series. *J Orthop Sports Phys Ther* 38(1):A81, 2008.
5. **Rosenthal MD**, Moore JH, Fellows D, DeBerardino T, Taylor DC. The effect of anterior cruciate ligament reconstruction on patellofemoral joint alignment. *J Orthop Sports Phys Ther* 35(1):A82, 2005.
6. **Rosenthal MD**. Atypical heel pain, bilateral calcaneal stress fractures. *J Orthop Sports Phys Ther* 35(1):A74, 2005.
7. Moore JH, DeBerardino TM, Goss DL, Hatler BS, Slivka EM, McMillian DJ, **Rosenthal MD**, Weishaar MD, Nelson BJ, Taylor DC. Clinical Diagnostic Accuracy of Physical Therapists to Orthopedic Surgeons at West Point on Direct Access Patients with Knee and Shoulder Injuries. *J Orthop Sports Phys Ther* 34(1):A54, 2004.
8. Moore JH, McMillian DJ, **Rosenthal MD**, Weishaar MD. Relative Risk for Patient with Direct Access to Physical Therapy. *J Orthop Sports Phys Ther* 34(1):A53, 2004.
9. **Rosenthal MD**, Moore JH, Taylor DC, DeBerardino TM. Effect of ACL Reconstruction on the Femoral Nerve H-Reflex. *J Orthop Sports Phys Ther* 34(1):A52, 2004
10. **Rosenthal MD**, DeBerardino TM. Knee Pain-Running. *Med Sci Sports Exerc* 35(5):S249, 2003

Non-Peer Reviewed Publications (book chapters):

1. **Rosenthal MD**, Moore JH. Impingement syndrome rehabilitation. *Clinical Orthopaedic Rehabilitation*. 4th ed. Giangarra, Manske RC. Elsevier, Philadelphia, PA 2017.
2. Schmidt E, Resler A, **Rosenthal MD**, Provencher MT. Postoperative Rehabilitation After Open or Arthroscopic Posterior Shoulder Stabilization. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
3. Flint JH, **Rosenthal MD**, Rue JPH. Introduction. Achilles tendinopathy and rupture. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
4. Hair LC, **Rosenthal MD**, Flint JH, Rue JPH. Nonoperative rehabilitation of Achilles tendonopathy. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
5. Flint JH, **Rosenthal MD**, Rainey CE, Rue JPH. Postoperative rehabilitation of Achilles tendonopathy. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.

6. Wells B, **Rosenthal MD**, Flint J, Rue JP. Nonoperative rehabilitation of Achilles tendon rupture. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
7. Flint JH, **Rosenthal MD**, Rainey CE, Rue JPH. Postoperative rehabilitation of Achilles tendon rupture. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
8. Wells B, **Rosenthal MD**, Flint JH, Rue JPH. Beyond Basic Rehabilitation: Return to Basketball Treatment of Achilles Tendon Rupture. *Orthopaedic Rehabilitation of the Athlete. Getting Back in the Game*. Reider BC, Provencher MT, and Davies GJ. eds. Elsevier, Philadelphia, PA 2015.
9. **Rosenthal MD**, Vath S. Evaluation of tibial stress fractures. Chapter in *Physical Therapy Case Files: Orthopaedics*. J Brummitt ed. McGraw Hill, New York, NY. 2013
10. **Rosenthal MD**, Vath S. Evaluation and management of the medial tibial stress syndrome. Chapter in *Physical Therapy Case Files: Orthopaedics*. J Brummitt ed. McGraw Hill, New York, NY. 2013
11. **Rosenthal MD**, Kane EJ. Rehabilitation following open versus arthroscopic posterior stabilization of the glenohumeral joint. Chapter (28) in *Shoulder Instability: A Comprehensive Approach*. Eds. Anthony Romeo and Matthew Provencher. Elsevier, Philadelphia, PA. 2012
12. **Rosenthal MD**, McMillian DJ. Comprehensive Evaluation and Management of Stress Fractures in Military Trainees. Chapter in Recruit Medicine volume. Textbook of Military Medicine. 2006
13. **Rosenthal MD**. Current Concepts in Rehabilitation of the ACL Reconstructed Knee. Orthopaedic Hyperguide. Sports Medicine Module. Vindico Medical Education. SLACK, Corp. November 2006

Non-Peer Reviewed Publications (non-book chapters):

1. **Rosenthal MD**, Hazel C, Malone T. Evidence for imaging in Sports MSK Rehabilitation. Sports Physical Therapy Section, Home Study Course. Manske RC. ed. July 2016.
2. Imaging of Athletic Injuries. Sports Physical Therapy Section. Home Study Course. **Rosenthal MD**. Editor. April, 2015.
3. Thelen M, Vachon T, **Rosenthal MD**. Imaging of pelvis, hip and thigh injuries in sport. Sports Physical Therapy Section. Home Study Course Chapter. Home Study Course, April, 2015.
4. Reinking M, Mulligan E, **Rosenthal MD**, Schuemann T, Springer B, Pabian P, Fink M, Briggs M, Weber M. *The Sports Physical Therapy Description of Special Practice*. American Board of Physical Therapy Specialties, American Physical Therapy Association, 2013.
5. Ellman MB, **Rosenthal MD**, Van Thiel GS, Sherman SL, Provencher MT. Rehabilitation Following Revision Anterior Cruciate Ligament Reconstruction. Sports Physical Therapy Section. Home Study Course. 2011
6. Gonick J, **Rosenthal MD**. What is the Female Athlete Triad? Sports Physical Therapy Section Newsletter. Summer 2002.

Non-Peer Reviewed Presentations:

1. **Rosenthal MD**, Manske R. Science Meets Practice. Should Movement Assessments Drive Clinical Interventions. APTA Combined Sections Meeting, New Orleans, LA. February, 2018.
Walsworth M, **Rosenthal, MD**. Low Back Pain. California Workers' Compensation Annual Meeting, Dana Point, CA. September 2017.
2. **Rosenthal MD**. Orthopedic Neurology and Electrophysiological Testing. American Specialty Health Annual Meeting. San Diego, CA. August 2017.
3. **Rosenthal MD**, Paterno M. APTA Orthopedic Section Annual Meeting. San Diego, CA. April 2017.
4. **Rosenthal MD**. Rehabilitation for reconstructions in the knee: TDWB is a necessary evil with adolescents. Pediatric Research in Sports Medicine Conference. San Diego, CA. January 2016.
5. Falsone S, Jenkins WL, Malone TR, Manske RC, Panariello R, **Rosenthal MD**. Pearls for problem solving the tough ones. Combined Sections Meeting. Indianapolis, IN. February 2015.

6. Pontillo M, Lorenz D, **Rosenthal MD**, Voos J. Crash, bang, boom: Injuries and rehabilitation of contact and tactical athletes. Combined Sections Meeting. Indianapolis, IN. February 2015.
7. Powell J, **Rosenthal MD**. Alternative Therapy Techniques in Sport. Sports Physical Therapy Section. Team Concept Conference. Las Vegas, NV. December 2014.
8. **Rosenthal MD**. Rehabilitation and return to play criteria for glenohumeral articular lesions. Sports Physical Therapy Section. Team Concept Conference. Las Vegas, NV. December 2014.
9. Schuemann T, **Rosenthal MD**. Dry Needling. Sports Physical Therapy Section. Team Concept Conference. Las Vegas, NV. December 2014.
10. **Rosenthal MD**. San Diego Shoulder Institute. Shoulder Injuries in Elite Athletes: Why Do Injuries Happen and What May Be Done for Prevention. June 2014.
11. **Rosenthal MD**. Advancements in Evaluation and Management of Patients with Knee Pain and Pathology. Arizona Physical Therapy Association. Spring Conference. May 2014.
12. Weber M, Reinking M, **Rosenthal MD**, Mulligan E. Sports Physical Therapy: What Makes Us Unique? Combined Sections Meeting. Las Vegas, NV. February 2014.
13. Schuemann T, Powell J, **Rosenthal MD**. Alternative Therapeutic Techniques. Sports Physical Therapy Section. Team Concept Conference. Las Vegas, NV. December 2013.
14. **Rosenthal MD**. Acupuncture and Trigger Point Dry Needling. Sports Physical Therapy Section. Team Concept Conference. Las Vegas, NV. December 2013.
15. **Rosenthal MD**. Hip to the Hip. American College of Sports Medicine. Advanced Team Physician Conference. San Diego, CA. December 2011.
16. **Rosenthal MD**, McMillian D. The Tactical Athlete. American Physical Therapy Association. Combined Sections Meeting. New Orleans, LA. February 2011.
17. **Rosenthal MD**. Finishing rehabilitation: A functional exercise approach. Joint Operational Deployment Course. Fort Sam Houston, TX. May 2009.
18. **Rosenthal MD**. Finishing rehabilitation: A functional exercise approach. Okinawa Naval Hospital. Okinawa, Japan. April 2008.
19. **Rosenthal MD**, McMillian D. Finishing rehabilitation: A functional exercise approach. Tripler Army Medical Center. Honolulu, HI. January 2008.
20. **Rosenthal MD**. Evaluation and management of knee disorders: Advancing clinical care. PRORehab, P.C., St. Louis, MO. May 2007.
21. **Rosenthal MD**. Tendon injuries...more than an 'itis'. Special Operations Medical Association Annual Meeting. Tampa, FL. December 2006.
22. **Rosenthal MD**. Stress fracture management: Science and practice. Joint Accessions and Best Practices Symposium. San Antonio, TX. April 2006.
22. **Rosenthal MD**. Finishing rehabilitation: A functional exercise approach. Naval Medical Center San Diego, CA. April 2006.
23. **Rosenthal MD**. Stress fractures, Orthopaedic neurology, and management of common acute orthopedic injuries. 45TH Navy Occupational Health and Preventive Medicine Conference-Independent Duty Corpsman track. Hampton, VA. March 2006.
24. **Rosenthal MD**, McMillian D. Finishing rehabilitation: A functional exercise approach. Fort Sill, Lawton, OK. January 2006
25. **Rosenthal MD**, McMillian D. Finishing rehabilitation: A functional exercise approach. Fort Bliss, El Paso, TX. January 2006
26. **Rosenthal MD**. Nerve injuries in the athlete warrior: Orthopedic neurology. Special Operations Medical Association. Annual Meeting. Tampa, FL. December 2005.
27. **Rosenthal MD**. Open and closed kinetic chain exercises: science and practice. Society of Military Orthopaedic Surgeons. 47th Annual Meeting. Orlando, FL. December 2005.
28. **Rosenthal MD**. Dynamic bone: prevention, evaluation, and comprehensive management of stress fractures. International Tactical EMS Association. Annual Meeting. San Diego, CA. September 2005.
29. **Rosenthal MD**. Dynamic bone: prevention, evaluation, and comprehensive management of

stress fractures. Special Operations Medical Association. Annual Meeting. Tampa, FL. December 2004.

Research Activity: (IP = in progress, UP = unpublished)

1. Do Exercise and Nutrition Science students possess what they promote? An analysis of the Functional Movement Screen in future healthcare professionals. **Rosenthal MD**, Breneman R. (IP)
2. Medical Screening in Physical Therapy: A survey of DPT student and Clinical Instructor utilization. **Rosenthal MD**, Gombatto S, Prescher KP. (IP)
3. Insufficient Flexion Movement Pattern Associated with Patellar Tendinopathy and Low Back Pain in NCAA Division I Men's Basketball Players, A Case Series. Nalbandian S, Lovell B, Medicke M, Bancells K, **Rosenthal MD**, Gombatto S.(IP)
4. Y-Balance Test as a Predictor of Running Related Injuries in High School Cross-Country Runners. Ruffe N, Source S, **Rosenthal MD**, Rauh MJ. (IP)
5. Clinical Relevance of the Flexion-Relaxation Response Test on the Management of Low Back Pain. Janke KC, Koo T, **Rosenthal MD**, Huxel-Bliven K, Cunningham B. (IP)
6. Assessment of Chiropractic Treatment for Low Back Pain and Smoking Cessation in Military Personnel. (NCT01692275). Coulter ID, **Rosenthal MD**, Penta JF, Myers KD. (UP)
7. Kane M, **Rosenthal MD**, Talbot LA. Strength, Pain and Function in Operation Iraqi Freedom/Operation Enduring Freedom Amputees: A Nurse-Managed Program (TSNRP Grant HU0001-08-1-TS10) (UP)
8. Clinical utility of six clinical tests in the evaluation of tibial stress fractures. **Rosenthal MD**, Cowan J. San Diego, CA. (UP)
9. The effects of cryotherapy on quadriceps activity and isometric strength in early postoperative anterior cruciate ligament reconstruction patients. Loro W, **Rosenthal MD**, Stoneman PD, Beekley M, Tenuta J. West Point, NY. (UP)
10. Diagnostic accuracy in direct access physical therapy evaluations of the knee and shoulder. Moore JH, Goss D, Hatler B, Slivka E, McMillian D, **Rosenthal MD**, Weishaar M. West Point, NY. (UP)
11. The effect of anterior cruciate ligament reconstruction on patellofemoral joint alignment. **Rosenthal MD**, Fellows D, Taylor D, DeBerardino TM, Moore JH. West Point, NY. (UP)

Research Grants Funded:

Source: San Diego State University, Summer Undergraduate Research Program

Title: Do ENS students possess what they profess. Functional Movement Screen performance in future healthcare science students.

Role: Principal Investigator

Dates: 05/18-09/18

Amount: \$2988

Description: The purpose of this study is to assess movement proficiency, as determined by the Functional Movement Screen (FMS), in students enrolled in exercise science studies at San Diego State University. The FMS assesses 7 fundamental movement patterns and assigns a score based upon quality of movement. Scores on the FMS have been associated with increased risk of injury in athletic populations. Performance (score) of exercise science students will be compared to groups studied in previously published research.

Research Grants Not Funded:

Source: Department of Defense, Congressionally Directed Medical Research Program, Peer Reviewed Medical Research Program, Clinical Trial Award

Title: Does Preoperative Blood Flow Restriction Training (BFRT) Improve Lower-Extremity

Performance and Associate with Improved Postoperative Outcomes?

Role: Principal Investigator. (Co-Investigators: Dr. Mitchell J. Rauh, Dr. Shawn Weber, Dr. John D. Garbrecht)

Dates: 08/18 - 08/21 (not selected for funding)

Amount: \$1,395,000 (over 4 years)

Description: The purpose of this study is to evaluate two intervention programs, administered for 8 weeks prior to surgery, on short-term outcomes following ACL reconstruction. 36 subjects in each group (BFRT, standardized strength training, and control) will participate in twice a week rehabilitation leading up to ACL reconstruction. Outcome measurements of lower extremity strength, lower extremity power, and patient reported outcomes will be evaluated and compared prior to the start of the training programs, upon completion of training program but prior to surgery, and then three months following surgery. BFRT is a novel rehabilitation technique which may produce improvements in performance not attained with current rehabilitation techniques.

Source: San Diego State University, University Grants Program

Title: Does blood flow restriction training (BFRT) result in greater rotator cuff strength gains than traditional strength training for individuals without shoulder pain?

Role: Principal Investigator

Dates: 12/17 - 6/19

Amount: \$9860

Description: The purpose of this study is to compare the effectiveness of BFRT to standard rehabilitation exercises on shoulder external rotation strength in healthy individuals without shoulder pain. Recommended treatment for rotator cuff injury includes strengthening exercises yet recovery can be slow with only 59% of patients reporting full recovery at 1 year. BFRT has been demonstrated to improve upper extremity strength in healthy populations. However, there have been no clinical studies evaluating its' effectiveness in rotator cuff strengthening. Twenty subjects will be enrolled. Ten will undergo a BFRT training protocol for 8 weeks and ten will complete the same exercises, utilizing American College of Sports Medicine recommendations for muscle strengthening, without BFRT. Outcomes will include shoulder rotational strength assessment and functional test performance.

Source: Department of Defense, Congressionally Directed Peer Reviewed Orthopaedic Research Program, Peer Reviewed Medical Research Program, Applied Research Award

Title: Improving Rehabilitation of Low Back Pain and Lower Extremity Injuries Using New Technology (Nordbord)

Role: Principal-Investigator. (Co-Investigators: Dr. Sara Gombatto, Dr. Mitchell J. Rauh, and Dr. Lori Tuttle SDSU & Dr. Shawn Weber)

Dates: 09/17 - 12/18

Amount: \$450,000

Description: The purpose of this study is to assess the effects of a Nordbord (NB) training program on increases in strength and performance characteristics of the gluteus maximus, hamstrings, lumbar extensors, and lumbar multifidus muscles. Participants in this study will include approximately 80 military and non-military personnel between the ages of 18-40 years old. Subjects will undergo pre-training program testing, a 12-week training program performed twice weekly utilizing the NB, followed by post-training program testing. Outcomes will include pre and post training program measurements for lower extremity performance (strength, balance, and power). Identifying a training program to improve strength/performance of muscles associated with low back pain and lower extremity injury and disability may expedite recovery and reduce re-injury or disability rates.

Source: Department of Defense, Congressionally Directed Peer Reviewed Orthopaedic Research Program, Peer Reviewed Medical Research Program, Clinical Trial Award

Title: Neuromuscular Physical Therapy Intervention To Reduce Injury and Attrition During Basic Training and First Year of Initial Assignment

Role: Co-Investigator, (Principal Investigator: Dr. Sara Gombatto, SDSU; Co-Investigators Dr. Mitchell Rauh, SDSU; Dr. Pinata Sessoms, NHRC)

Dates: 09/17- 09/19

Amount: \$2,200,000

Description: The **purposes** of this study are to *identify risk factors* for attrition and injury during basic training and first enlistment, and to determine whether a group-based *8-week pre-training program can decrease likelihood of dropout and injury*. Studying both risk factors and moderating effects of a training program, performed by 100 subjects, will provide insight into which Marines would benefit most from the pre-training program for future widespread implementation. Outcome measures will include biomechanics testing and muscle performance measures.

Source: San Diego State University, University Grants Program

Title: Does blood flow restriction training (BFRT) improve outcomes in individuals with persistent symptoms following lateral ankle sprain?

Role: Principal Investigator

Dates: 01/17 - 06/18

Amount: \$9860

Description: The purpose of this study is to assess the effectiveness of BFRT to standard rehabilitation in individuals with persistent lower extremity pain and dysfunction following a lateral ankle sprain (LAS). Deficits in lower extremity (LE) strength and balance have been noted to persist despite extensive rehabilitation following LAS. BFRT has been demonstrated to improve leg strength and function in healthy populations. However, there have been no clinical studies evaluating its' effectiveness in a population with persistent pain following LAS. This pilot research will assess the effectiveness of BFRT on recovery following LAS. Twenty subjects will be enrolled. Ten will undergo a BFRT training protocol for 6 weeks and 10 will complete similar exercises without BFRT. Outcomes will include LE strength, power and dynamic balance measures as well as patient reported outcome measures related to pain, function, and fear-avoidance.

Source: Sports Physical Therapy Section Legacy Fund

Title: - Does post-operative blood flow restriction training (BFRT) improve quadriceps and hamstrings function and associate with improved short-term post-operative outcomes?

Role: Principal Investigator. (Co-Investigators: S. Weber, Naval Medical Center San Diego and M. Rauh, SDSU)

Dates: 03/17 - 03/19

Amount: \$9891

Description: The purpose of this study is to assess the effect of BFRT verses a progressive resisted exercise program on lower extremity strength and functional performance in individuals awaiting knee surgery. Participants will include 22 individuals with an anterior cruciate ligament deficient knee, injured within the prior 6 months. Participants will be randomized to one of two training programs, which will be performed twice weekly for six weeks, leading up to surgery and outcomes will be assessed at 2, 6, and 12 weeks following surgery.

Membership in Scientific/Professional Organizations:

American Physical Therapy Association	1992 - present
Section on Sports Physical Therapy – APTA	1992 - present
Section on Clinical Electrophysiology – APTA	1994 - present
National Strength and Conditioning Association	1994 - present
National Athletic Trainers Association	1995 - present

Consultative and Advisory Positions Held:

1. Assistant Editor, Sports Physical Therapy Section, Home Study Courses, February 2018 - present.
2. International Editorial Review Board Member, Musculoskeletal Imaging component, Journal of Orthopaedic and Sports Physical Therapy, January 2016 to present.
3. Manuscript Reviewer, International Journal of Sports Physical Therapy, September 2016 – present.
4. Adjunct Research Fellow, Rocky Mountain University of the Health Professions, March 2015 to present.
5. Manuscript Reviewer, Case Reports, Journal of Orthopaedic and Sports Physical Therapy, January 2009 – December 2015.
6. Manuscript Reviewer, Physical Therapy in Sport Journal, March 2010 to present.
7. Manuscript Reviewer, Sports Health January 2011 to present.
8. Integration Panel Member, Department of Defense, Congressionally Directed Medical Research Program, Peer Reviewed Orthopedic Research Program. March 2010 to March 2015.
9. Chair, Sports Specialty Council, American Board of Physical Therapy Specialties. January 2012-December 2013.
10. Sports Specialty Council Member and Item Bank Coordinator, American Board of Physical Therapy Specialties. January 2010 to December 2011.
11. Research Committee Member. Sports Physical Therapy Section. 2008-2010.
12. Committee of Content Experts, Sports Physical Therapy Section, American Board of Physical Therapy Specialties. February 2005 to January 2009.
13. Specialization Academy of Content Experts, American Board of Physical Therapy Specialties. January 2002 to December 2004.

Professional Honors and Awards:

Alumnus of the Year

U.S. Army-Baylor University DPT Alumni Association
2015

American Physical Therapy Association
Sports Physical Therapy Section
Lynn Wallace Excellence in Clinical Education Award
2014

Master Clinician
Naval Medical Center
San Diego, CA
2012

Senior Physical Therapist of the Year
U.S. Navy
2006

American Physical Therapy Association
Sports Physical Therapy Section
Excellence in Research Award
2004

Continuing Education:

Have attended over 59 post-professional training courses since 1993. In the past 5 years, 16 post-professional training courses have been completed. Full listing is available upon request.

Recent Continuing Education:

2018

Musculoskeletal Ultrasound: A Comprehensive Approach
San Diego, CA (1.6 CEUs)

APTA Combined Sections Meeting
New Orleans, LA (2.1 CEUs)

2017

Sports Physical Therapy Section, Team Concepts Conference
Las Vegas, NV (1.8 CEUs)

Treating the Multisport and Endurance Athlete: Achieving Peak Performance
Hospital for Special Surgery
Webinar (9/15-16) (.8 CEUs)

Emergency Medical Response Course
Cogent Steps, LLC
San Diego, CA (2.4 CEUs)

APTA Combined Sections Meeting
San Antonio, TX (2.1 CEUs)

2016

Personalized Blood Flow Restriction Training
Owens Recovery Science
Evanston, IL (0.8 CEUs)

APTA Combined Sections Meeting
Anaheim, CA (1.1 CEUs)

2015

APTA Combined Sections Meeting
Indianapolis, IN (2.1 CEUs)

2014

Sports Physical Therapy Section, Team Concepts Conference
Las Vegas, NV (1.8 CEUs)

APTA Combined Sections Meeting
Las Vegas, NV (2.1 CEUs)

Training the Rotational Athlete
Hospital for Special Surgery
IMG Academy
Bradenton, FL (1.1 CEUs)

2013

Sports Physical Therapy Section, Team Concepts Conference

Las Vegas, NV (1.8 CEUs)

APTA Clinical Education Course
San Diego, CA (1.6 CEUs)

Trigger Point Dry Needling
San Diego, CA (2.6 CEUs)

APTA Combined Sections Meeting
San Diego, CA (2.1 CEUs)