



Eugene Y. Roh, MD

Clinical Associate Professor, Orthopaedic Surgery

CLINICAL OFFICE (PRIMARY)

- **Stanford University Dept of Orthopaedic Surgery**

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ACADEMIC CONTACT INFORMATION

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Bio

BIO

Dr. Roh is a triple boarded sports medicine specialist treating sports/activity-related osteoarthritis and tendinopathy by providing ultrasound-guided minimally invasive interventions and orthobiologics.

He started the sports & musculoskeletal ultrasound clinic and orthobiologics such as PRP in Orthopedic Surgery & Sports medicine department since his appointment in 2011.

Dr. Roh has provided ultrasound-guided interventions and orthobiologics for many elite sports teams including the professional basketball team and the professional football team. He was one of Team USA's physicians during the 2018 Olympic games and worked during the NBA finals. He serves as a team physician for the SF 49ers, Stanford Men Soccer, Golf, Fencing, and Wrestling.

Dr. Roh's research interests include measuring outcomes of non-surgical orthobiologic treatment such as PRP, adipose tissue, or bone marrow and ultrasound-guided minimally invasive treatment for tendon injury and arthritis.

He focuses on soccer-related injury, basketball-related injury, and other arthritis or tendinopathy from repetitive use of tendon and joint.

CLINICAL FOCUS

- Tendinopathy
- Platelet-Rich Plasma
- Physical Medicine and Rehab
- Non operative sports injury treatment
- Shoulder Osteoarthritis
- Knee Osteoarthritis
- Sports and Musculoskeletal Ultrasound

- Digital Health
- Stem Cell Research

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Orthopaedic Surgery
- Member, Wu Tsai Human Performance Alliance

ADMINISTRATIVE APPOINTMENTS

- SF 49ers, Team physician in Sports ultrasound and Orthobiologics treatment, Stanford University Sports Medicine, (2013- present)
- Team Physician, Stanford Athletic Department, (2013- present)
- Golden State Warriors, Consultant in Sports ultrasound and Orthobiologics treatment, Stanford University Sports Medicine, (2014-2019)
- Team USA Physician, USOC(United States Olympic Committee) Team USA for 2018 Olympic games, (2017-2018)
- Director, Stanford Musculoskeletal Sports Ultrasound Medicine Service, (2011- present)
- Site Director, Residency Program PM&R, Stanford, (2015- present)
- Member and Venue Medical Officer, 2018 Winter Olympic Organizing Committee, Medical division, (2016- present)

HONORS AND AWARDS

- Best Teaching Award, Stanford PM&R (2016)
- Arbor Free Clinic Chief Resident Award, Stanford University, Physical Medicine and Rehabilitation (2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Director, Stanford Orthobiologics Clinic (2022 - present)
- Faculty and Mentor, Stanford ACGME PM&R Sports Medicine Fellowship (2011 - present)
- Committee Member, Stanford Hospital Point of Ultrasound Care (2020 - present)
- Primary team physician, Stanford Athletics (2011 - present)
- Committee Member, Stanford PM&R Education committee (2011 - present)
- Didactics organizer, Stanford PM&R Resident Musculoskeletal (2011 - present)
- Reviewer, Journal of Ultrasound Medicine (2014 - present)
- Member, American Registry For Diagnostic Medical Sonography (2011 - present)
- Member, Association of Academic Physiatrists (2011 - present)
- Member, American Medical Society for Sports Medicine (2011 - present)
- Member, American Board of Physical Medicine & Rehabilitation (2011 - present)
- Member, American Association of Physical Medicine & Rehabilitation (2011 - present)
- Member, American Association of Pain Management in Ultrasound (2011 - present)
- Member, American Board of Internal Medicine (2011 - present)
- Member, American Institute of Ultrasound in Medicine (2011 - present)

PROFESSIONAL EDUCATION

- Board Certification: Sports Medicine, American Board of Physical Medicine and Rehabilitation (2012)
- Board Certification: Physical Medicine and Rehab, American Board of Physical Medicine and Rehabilitation (2011)
- Residency: MetroWest Medical Center Transitional Year (2007) MA
- Residency: Stanford Hospital and Clinics (2010) CA

- Fellowship: Harvard Medical School MGH - Spaulding Rehabilitation Hospital (2011) MA
- Medical Education: Yonsei University College Of Medicine (1999) South Korea
- Board Certification, Sports Medicine , American Board of PM&R, ABFM (2012)
- Board Certification, Musculoskeletal Ultrasound , ARDMS (American Registry for Diagnostic Medical Sonography) (2012)
- Board Certification: Internal Medicine, American Board of Internal Medicine (2007)

COMMUNITY AND INTERNATIONAL WORK

- 2018 Winter Olympic games
- 2018 Winter Olympic Organization, South Korea

LINKS

- <http://med.stanford.edu/news/all-news/2018/02/5-questions-eugene-roh-on-serving-as-team-usa-physician.html>: <http://med.stanford.edu/news/all-news/2018/02/5-questions-eugene-roh-on-serving-as-team-usa-physician.html>
- Research gate: Eugene Roh on ResearchGate

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

SCHOLARLY PUBLICATIONS

1. Peer-reviewed articles

1. Steele K, Roh EY, Ladd A, Rose J. Rotational velocity of the elite golf swing: Benchmarks for amateurs. Journal of Applied Biomechanics. Submitted.

2. Poster presentation and abstract

1. Lyly Minh, Roh EY, Distal Clavicular Osteolysis Associated with Hand-to- Hand and Combat: A Case Report, 2013 AAPM&R annual assembly
2. Dutton R, Klima R, Roh EY. Pelvic Digit As An Unusual Cause of Hip Pain: A Case Report, 2013 AAPM&R annual assembly
3. Patel A, Roh EY, Radicular Pain: A case Report, 2012 AAPM&R annual assembly
4. Roh EY, Mitra R. Chronic refractory coccydynia secondary to pilonidal cyst: A Case Report, 2010 AAPM&R annual assembly
5. Roh EY, Kay J. Use of digital pen and paper technology for collection of patient reported symptom and functional status improves physician documentation. Poster. 2005 American College of Rheumatology annual assembly.
6. Roh EY, Davis J. Clinical Characteristics of a US cohort of spondylitis patients. 2004 American College of Rheumatology annual assembly.
7. Roh EY, Tethered cord development following conservative management of acute spinal epidural hematoma. 2015 AAP Annual Meeting

CLINICAL TRIALS

- Comparative Effectiveness of Particulate Versus Nonparticulate Steroid Injections for Musculoskeletal Conditions, Recruiting
- The Effect of Micro Fragmented Adipose Tissue (MFAT) on Shoulder Osteoarthritis, Recruiting
- Validity of AI in Treatment of the Musculoskeletal Conditions by Vifive, Recruiting
- The Effect of Micro Fragmented Adipose Tissue (MFAT) on Knee Osteoarthritis, Not Recruiting

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- PM& R Sports Medicine (Fellowship Program)

Publications

PUBLICATIONS

- **Posterior intra-articular hip injections: a pilot study investigating a new approach.** *Journal of ultrasound*
Kaufman, M. W., Nguyen, C., Meng, Y., Roh, E.
2024
- **Neurogenic Thoracic Outlet Syndrome in Division 1 Collegiate Athletes: Presentation, Diagnosis, and Treatment.** *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*
Olson, E. M., Dyrek, P., Harris, T., Fereydooni, A., Lee, J. T., Kussman, A., Roh, E.
2023
- **Team's Average Acute:Chronic Workload Ratio Correlates with Injury Risk in NCAA Men's Soccer Team.** *PM & R : the journal of injury, function, and rehabilitation*
Bakal, D. R., Friedrich, T. R., Keane, G., White, B., Roh, E. Y.
2022
- **Impact of Scalene Muscle Botulinum Toxin Injection With and Without Surgery in Neurogenic Thoracic Outlet Syndrome.** *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*
Fereydooni, A., Ho, V. T., Olson, E. M., Dyrek, P., Harris, T., Kussman, A., Roh, E., Lee, J. T.
2022
- **Orthobiologic Injectables in the Ankle Joint: a Narrative Review** *MLTJ-MUSCLES LIGAMENTS AND TENDONS JOURNAL*
Roh, E. Y., Rana, M. S., McInnis, K. C., Bakal, D. R., Borgstrom, H., Borg-Stein, J.
2022; 12 (4): 453-477
- **Impact of Scalene Muscle Botulinum Toxin Injection with and without Surgery in Neurogenic Thoracic Outlet Syndrome**
Fereydooni, A., Ho, V. T., Olson, E., Dyrek, P., Harris, T., Kussman, A., Roh, E. Y., Lee, J. T.
MOSBY-ELSEVIER.2021: E410
- **Ultrasound of Thumb Muscles and Grasp Strength in Early Thumb Carpometacarpal Osteoarthritis.** *The Journal of hand surgery*
Lai, C., Kenney, D., Kerkhof, F., Finlay, A., Ladd, A., Roh, E.
2021
- **Predictors Of Relief Following Botulinum Injection For Thoracic Outlet Syndrome**
Olson, E., Dyrek, P., Fereydooni, A., Harris, T., Lee, J. T., Kussman, A., Roh, E. Y.
LIPPINCOTT WILLIAMS & WILKINS.2021: 377
- **Predicting Return To Play In NCAA Division 1 Athletes With Neurogenic Thoracic Outlet Syndrome**
Dyrek, P., Olson, E., Fereydooni, A., Harris, T., Kussman, A., Roh, E., Lee, J. T., Segovia, N.
LIPPINCOTT WILLIAMS & WILKINS.2021: 390
- **Finger Pain In A Professional Dog Groomer**
Mullins, K., Roh, E.
LIPPINCOTT WILLIAMS & WILKINS.2020: 538-39
- **Effectiveness of Ultrasound-Guided Pulsed Radiofrequency Treatment in Patients with Refractory Chronic Cervical Radicular Pain.** *Pain physician*
Lee, S. H., Choi, H. H., Roh, E. Y., Chang, M. C.
2020; 23 (3): E265-E272
- **Effectiveness of Ultrasound-Guided Pulsed Radiofrequency Treatment in Patients with Refractory Chronic Cervical Radicular Pain** *PAIN PHYSICIAN*
Lee, S., Choi, H., Roh, E., Chang, M.
2020; 23 (3): E265-E271

- **Sigma-1 receptor PET/MRI for identifying nociceptive sources of radiating low back pain**
Yoon, D., Cipriano, P., Carroll, I., Curtin, C., Roh, E., Wilson, T., Biswal, S.
SOC NUCLEAR MEDICINE INC.2020
- **Orthobiologics for the Hip Region: A Narrative Review.** *PM & R : the journal of injury, function, and rehabilitation*
McInnis, K. C., Chen, E. T., Finnoff, J. T., Roh, E. Y., Borg Stein, J.
2020
- **Ultrasonographic measurement of the cross-sectional area of the axillary nerve** *MUSCLE & NERVE*
Yoon, J., Park, J., Levin, J., Roh, E. Y., Park, H., Won, S.
2019; 60 (1): 95–98
- **ULTRASONOGRAPHIC MEASUREMENT OF THE CROSS-SECTIONAL AREA OF THE AXILLARY NERVE.** *Muscle & nerve*
Yoon, J. S., Park, J. H., Levin, J., Roh, E. Y., Park, H. J., Won, S. J.
2019
- **Golf Swing Rotational Velocity: The Essential Follow-Through** *ANNALS OF REHABILITATION MEDICINE-ARM*
Steele, K. M., Roh, E. Y., Mahtani, G., Meister, D. W., Ladd, A. L., Rose, J.
2018; 42 (5): 713–21
- **Golf Swing Rotational Velocity: The Essential Follow-Through.** *Annals of rehabilitation medicine*
Steele, K. M., Roh, E. Y., Mahtani, G., Meister, D. W., Ladd, A. L., Rose, J.
2018; 42 (5): 713–21
- **Use of F-18-sodium fluoride bone PET for disability evaluation in ankle trauma: a pilot study** *BMC MEDICAL IMAGING*
Jeon, T., Kim, S., Park, J., Park, J., Roh, E. Y.
2018; 18: 34
- **Poster 156 Synovial Osteochondromatosis as a Rare Cause of Hip Pain: A Case Report.** *PM & R : the journal of injury, function, and rehabilitation*
Pun, M., Roh, E. Y.
2016; 8 (9S): S213-?
- **Comparison of Muscle Onset Activation Sequences between a Golf or Tennis Swing and Common Training Exercises Using Surface Electromyography: A Pilot Study.** *Journal of sports medicine (Hindawi Publishing Corporation)*
Vasudevan, J. M., Logan, A., Shultz, R., Koval, J. J., Roh, E. Y., Fredericson, M.
2016; 2016: 3987486-?
- **Atlas of Ultrasound-Guided Musculoskeletal Injections**
Malanga, G., Mautner, K., Roh, E. Y., et al
McGraw Hill Education.2013
- **The Relationship between Golf Swing Trunk Rotation Biomechanics and Low Back Pain in Golfers** *Spine*
Said, M., Johnson, E., Roh, E.
2013; Sep Oct: 21-26
- **Preseason Training for Golfers with Low Back Pain** *Spine*
Roh Eugene Y, Geraci M, Smuck M
2012; Jan Feb: 17-21
- **Basic Appearance of Ultrasound Structures and Pitfalls** *PHYSICAL MEDICINE AND REHABILITATION CLINICS OF NORTH AMERICA*
McDonald, S., Fredericson, M., Roh, E. Y., Smuck, M.
2010; 21 (3): 461-?

PRESENTATIONS

- Golf Swing Analysis - North America Spine Society(NASS) (10/10/2013 - 10/11/2013)
- Short Course on MSK Ultraosund - 2014 Walter Reed PM&R Annual Short Course (9/16/2014 - 9/19/2014)
- Introduction to Sports Medicine - Wonju Yonsei University (4/1/2014)
- Rehabilitation of Golfers with Low Back Pain - 2014 AAPM&R Annual Assembly (11/12/2014 - 11/15/2014)

- Medical Issues in Sports Medicine - MASS General Hospital Sports Medicine
- Advanced Therapeutic Exercises and Ultrasound-Guided Procedures for Illiotibial Band Syndrome - 2014 AAPM&R Annual Assembly (11/12/2014 - 11/15/2014)
- Ultrasound Evaluation of Carpal Tunnel Syndrome - 2014 AAPM&R Annual Assembly (11/12/2014 - 11/15/2014)