# **CURRICULUM VITAE**

For

# RAFAEL F. ESCAMILLA, PH.D. P.T., C.S.C.S., F.A.C.S.M. Professor, Physical Therapy

California State University, Sacramento College of Health and Human Services Department of Physical Therapy Doctor of Physical Therapy Program (DPT)

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# **EDUCATION**

2000-2002	Master of Physical Therapy (MPT), Elon University, Elon College, NC, Department of Physical Therapy Education
	GPA: 4.0
1990-95	<u>Doctor of Philosophy (PhD)</u> , Auburn University, Auburn, AL Department of Health and Human Performance
	Major Area of Study: Biomechanics
	Minor Area of Study: Exercise Physiology; Nutrition GPA: 4.0
1986-87	Master of Science (MS), Washington State University, Pullman Washington, Department of Physical Education Major Area of Study: Biomechanics
	Minor Area of Study: Exercise Physiology
1980-83	<u>Bachelor of Arts (BA)</u> , Linfield College, McMinnville, Oregon Department of Mathematics and Department of Physical Education Double Major in Mathematics and Physical Education.
1978-80	Associate of Arts (AA), Walla Walla Community College, Walla Walla, Washington.

#### WORK EXPERIENCE (EDUCATIONAL INSTITUTIONS)

2002 to Current <u>California State University, Sacramento</u>, Sacramento, CA

College of Health and Human Services

Department of Physical Therapy

Doctor of Physical Therapy Program (DPT)

Professor, Physical Therapy

Courses taught in the CSUS Doctor of Physical Therapy Program:

- 1) PT 600 Pathokinesiology
- 2) PT 602 Evidence Informed Practice I
- 2) PT 606 Therapeutic Measurements and Techniques
- 3) PT 620 Therapeutic Exercise 1
- 4) PT 626 Therapeutic Agents
- 5) PT 636 Geriatrics/Gerontology
- 6) PT 638 Health and Wellness
- 7) PT 660 Certified Strength and Conditioning Specialist

Courses taught in the CSUS Department of Kinesiology:

1) KINS 068 Weight Training

2013 – Current Sacramento City College, Sacramento, CA

Science and Allied Health Division,

Physical Therapy Assistant Program. Adjunct Professor.

Taught PTA 110 Kinesiology

Taught PTA 140 Therapautic Exercise

2010 – 2011 <u>University of South Florida,</u> Tampa, FL

Adjunct Professor

1998 to 2002 **Duke University Medical Center**, Durham, NC

Department of Physical Therapy and Occupational Therapy

Assistant Professor of Orthopaedic Surgery

Courses taught in Duke Doctor of Physical Therapy Program:

- 1) PT 307 Human Movement Sciences I/Biomechanics
- 2) PT 322 Arthrological and Pathological Movement Science

2001 to 2002 Elon University, Elon, NC

Department of Physical Therapy Education.

Instructor. Elective courses taught: Certified Strength and

Conditioning Specialist; Biomechanics of the Throwing Shoulder

	and Elbow; Knee Biomechanics During Common Open and Closed Kinetic Chain Rehabilitation Exercises.
1997-1998	California Polytechnic State University, San Luis Obispo, CA College of Science and Mathematics; Department of Physical Education and Kinesiology. Assistant Professor and Pre-Physical Therapy Coordinator. Graduate and undergraduate courses taught: Mechanical Kinesiology, Biomechanics, Human Muscle Anatomy, Human Anatomy and Physiology, Weight Training, and Progressive Strength Training.
1996-97	California Polytechnic State University, San Luis Obispo, CA College of Science and Mathematics; Department of Physical Education and Kinesiology. Lecturer and Pre-Physical Therapy Coordinator. Undergraduate and graduate courses taught: Mechanical Kinesiology, Biomechanics, Human Muscle Anatomy, Weight Training, and Progressive Strength Training.
1996	<u>Linfield College</u> , McMinnville, OR. Department of Physical Education. Instructor. Undergraduate courses taught: Kinesiology, Foundation and Development in Physical Education.
1994-96	<u>University of Alabama at Birmingham</u> , Birmingham, AL Department of Human Studies/Kinesiology. Instructor. Undergraduate and graduate courses taught: Applied Kinesiology, Mechanical Analysis of Motor Skills.
1992	<u>University of Alabama at Birmingham</u> , Birmingham, AL Department of Human Studies/Kinesiology. Instructor: Weight Training.
1990-91	<u>Auburn University</u> , Auburn, AL. Department of Health and Human Performance. Instructor: Weight Training.
1988-89	Walla Walla Community College, Walla Walla, WA Instructor: Physics, Algebra, Pre Calculus, Computer Concepts, Computer Programming, Word Processing, Circuit Weight Training, and Tennis.
1988	<u>University of Idaho</u> , Moscow, ID. Department of Physical Education. Instructor: Weight Training.
1986-87	<u>Washington State University</u> , Pullman, WA. Department of Physical Education. Instructor: Weight Training.

1984-85 <u>Lewis Clark State College</u>, Lewiston, ID. Department of Physical

Education. Instructor: Fitness/Wellness, Weight Training,

Aerobics.

1983-89 Clarkston High School, Clarkston, WA.

Instructor: Mathematics and Computer Science

1983-84 <u>Clarkston School District</u>, Clarkston, WA.

Instructor: Summer Fitness - Weight Training and Conditioning.

1983 **McMinnville High School**, McMinnville, OR.

Student Instructor: Geometry, Math and Physical Education.

# **WORK EXPERIENCE (RESEARCH INSTITUTIONS)**

2009 to 2010 The Andrews Institute, The Andrew-Paulos Research and

2014 - current Education Institute, Gulf Breeze, FL;

Director of Research, Consultant

1998 to 2002 **<u>Duke University Medical Center</u>**, Durham, NC

Division of Orthopaedic Surgery, Department of Surgery

Assistant Professor of Orthopaedic Surgery

Director of the Michael W. Krzyzewski Human Performance

Biomechanics Laboratory

1991-1996 <u>American Sports Medicine Institute</u>, Research Division

Birmingham, AL

Biomechanist

# WORK EXPERIENCE (PHYSICAL THERAPY AND RELATED)

2003 – Current Results Physical Therapy & Training Center, Sacramento, CA

Staff Physical Therapist; Director of Research; Co-Founder/Co-Director of Northern California Sports Medicine Education

2011 – Current <u>U.S. HealthWorks/Concentra</u>, Sacramento, CA

Staff Physical Therapist

2012 – Current	Folsom Prison, California State Prison, Sacramento, Represa, CA Staff Physical Therapist
2011 – 2012	Remedy Rehab, Sacramento, CA Registry Physical Therapist
2011 - 2012	Rocklin Physical Therapy, Rocklin, CA Staff Physical Therapist
2011 - 2012	<u>Fisher Physical Therapy</u> , Woodland, CA Staff Physical Therapist
2011 - 2012	Twin Rivers Physical Therapy, Clarkston, WA Staff Physical Therapist
2003 – 2006	<u>Murieta Physical Therapy</u> , Rancho Murieta, CA Staff Physical Therapist
2002	Alamance Regional Medical Center Rehabilitation at Mebane Medical Park, Mebane, NC Student Physical Therapist Out-patient rehabilitation
2002	Alamance Regional Medical Center Physical and Sports Rehabilitation, Burlington, NC Student Physical Therapist Out-patient orthopaedics and in-patient acute
2001	<u>Duke University Medical Center</u> , Durham, NC Student Physical Therapist Adult neurological rehab
1998	Flanders Physical Therapy, Portland, OR Student Physical Therapist Out-patient orthopaedics
1993-95	<b>SportsLife Fitness Club</b> and <b>Gold's Gym</b> , Birmingham, AL. Personal Trainer.

#### SPORTS MEDICINE CONTINUING EDUCATION FOR PHYSICAL THERAPISTS

In spring 2014 I co-developed with Kyle Yamashiro and Dr Ken Akizuki the San Francisco Giants First Annual Sports Medicine Conference, which was held in San Francisco in January 2015 and then again in January 2016.

In 2012-2013 I co-developed with Kyle Yamashiro a Long Term Sports Medicine Course, presented by the Northern California Sports Medicine Education. Course met 3 hours per month from January to May annually at Results Physical Therapy and Training Center, Sacramento, CA.

In 2005-2006 I co-developed with Kyle Yamashiro a Long Term Sports Medicine Course, presented by the Northern California Sports Medicine Education. Course met 3 hours per week from January to May annually at Results Physical Therapy and Training Center.

From 2004 to 2012 I have taught weekend continuing education physical therapy courses throughout the country for Northeast Seminars.

# PROFESSIONAL HONORS

CA.

2017	<b>Escamilla, R.F.</b> American Sports Medicine Institute Career Service Award, awarded at the 35 <sup>th</sup> Annual American Sports Medicine Institute Injuries in Baseball Conference, Dallas, TX.
2015	<b>Escamilla, R.F.</b> University Award for Research, Scholarship and Creative Activity for Senior Faculty, California State University, Sacramento.
2014	<b>Escamilla, R.F.</b> Outstanding Scholarly and Creative Activity Research Award for the College of Health and Human Services, California State University, Sacramento.
2013	<b>Escamilla, R.F.</b> Finalist for the University President's Award for Research & Creative Activity, California State University, Sacramento.
2010	<b>Escamilla, R.F.</b> Distinguished Physical Therapy Alumni Award. Awarded at the 2010 Elon University Doctor of Physical Therapy Graduation ceremony. Elon, NC.
2007	<b>Escamilla, R.F.</b> , Zheng, N., Hreljac, A., Imamura, R., MacLeod, T.D., Edwards, W.B., Fleisig, G.S., & Wilk, K.E. <u>Cruciate ligament force between the forward lunge and side lunge with and without a stride.</u> Awarded best presentation at the

1996 **Escamilla, R.F.**, Andrews, J.R., Fleisig, G.S., & Azar, F.M. Award winning

2007 California Physical Therapy Association Annual Conference, Los Angeles,

videotape program entitled "Biomechanics of the Throwing Shoulder". Awarded by The American Academy of Orthopaedic Surgeons at their 63rd annual meeting.

Zheng, N., Fleisig, G.S., **Escamilla, R.F.**, Barrentine, S.W., Wilk, K.E., Andrews, J.R. Paper entitled "Forces of the knee during open and closed kinetic chain exercises". Clinical Biomechanics finalist, American Society of Biomechanics.

# **ATHLETIC HONORS**

1995	W.N.P.F. 1995 World Powerlifting Champion, Atlanta, GA W.N.P.F. 1995 National Powerlifting Champion, Savanna, GA
1994	W.N.P.F. 1994 World Powerlifting Champion, Lancaster, PA W.N.P.F. 1994 National Powerlifting Champion, Atlanta, GA
1993	W.N.P.F. 1993 World Powerlifting Champion, Daytona Beach, FL
1978, 1979	College - Conference Champion in football - Walla Walla Community College (ranked $4^{\text{th}}$ in the nation)
1980	College - Conference Champion in football - Linfield College (ranked $1^{\rm st}$ in the nation)
1981	"Running Back of the Week" Award in College Football – Linfield College
1982	College - Conference Champion in Track and Field - Linfield College (men's 4 x 100m relay)
1974-1978	High School - Most valuable and inspirational awards in football, wrestling, and track and field; "Outstanding Athlete" and boxing awards.

# **CERTIFICATION OF LICENSURE**

2003 – Current	Physical Therapist (CA) – License Number PT28369
2011-2013	Physical Therapist (WA) – License Number PT60224071
2002 - 2004	Physical Therapist (NC) – License Number 9003

# **OTHER CERTIFICATIONS**

2006 – Current Fellow for the American College of Sports Medicine (F.A.C.S.M.)

1992 - Current Certified Strength and Conditioning Specialist (C.S.C.S.) – Personal

trainer to high school, college and professional athletes

1992 - Current Certification in CPR

#### **EXECUTIVE MEDICAL BOARD MEMBER**

1998 to 2002 The Spencer Foundation for Spinal Cord Injury Research and

Rehabilitation, Durham, NC

# **PROFESSIONAL MEMBERSHIP**

2001-present American Physical Therapy Association

2001-present Sports Section of the American Physical Therapy Association

2001-present California Physical Therapy Association

1999-present American Society of Biomechanics

1995-present American College of Sports Medicine

2001-present International Society of Biomechanics in Sports

1990-present National Strength and Conditioning Association

# **BOOK CHAPTER PUBLICATIONS**

- 1. Escamilla, R.F & Finatto, Paula. Core stabilization. In F. Azar, K.E. Wilk, (Eds.), Orthopaedic Knowledge Update: Sports Medicine (pp.), 6<sup>th</sup> Edition. American Academy of Orthopaedic Surgeons, 2019.
- **2. Escamilla, R.F.** <u>Pitching Biomechanical Comparisons Among Fastball, Slider, Curveball, and Changeup Pitch Types in Professional Baseball Pitchers.</u> In Subic, A. et al. (Eds), The Impact of Technology on Sport VIII, Elsevier Procedia, 2019.

- 3. Escamilla, R.F. Peak Patellofemoral and ACL/PCL Forces While Performing the Forward Lunge Exercise With Varying Techniques. In Subic, A. et al. (Eds), The Impact of Technology on Sport VIII, Elsevier Procedia, 2019.
- **4.** Escamilla, R.F., Dowling, B, & Fleisig, G.S. <u>Biomechanics of swinging a bat.</u> In C.S. Ahmad, A.A. Romeo (Eds), Baseball Sports Medicine, Wolters Kluwer Health: Medical Practice: New York, 2019.
- **5.** Yamashiro, K. & **Escamilla, R.F.** <u>Proprioceptive neuromuscular facilitation.</u> In L.T. Brody, C.M. Hall, S. Bell (Eds), Therapeutic Exercise: Moving Toward Function, 4<sup>th</sup> Edition (chap 15). Lippincott Williams & Wilkins: Philadelphia, 2017.
- **6. Escamilla, R.F.** Core stabilization. In M. Miller, K.E. Wilk, J. Irrgang (Eds.), Orthopaedic Knowledge Update: Sports Medicine (pp.), 5<sup>th</sup> Edition. American Academy of Orthopaedic Surgeons, 2015.
- C.D. Taylor, Escamilla, R.F., J.E. Zachazewski. Peripheral Nerve Injuries. B. Magee, J.E. Zachazewski, W.S Quillen (Eds.), Pathology and intervention in musculoskeletal rehabilitation (2<sup>nd</sup> Ed), Elsevier Saunders: Missouri. 2015.
- **8. Escamilla, R.F.** Core trunk stabilization. In J.S. Dines, D.W. Altchek, J.R. Andrews, N.S. ElAttrache, K.E. Wilk, L.A. & Yocum (Eds.), Sports Medicine of Baseball (pp. 498-511). Lippincott Williams & Wilkins, Philadelphia, 2012.
- 9. Fleisig, G.S., Escamilla, R.F., & Andrews, J.R. <u>Applied biomechanics of baseball pitching</u> In D.J. Magee, R.C. Manske, J.E. Zachazewski, & W.S. Quillen (Eds.), Athletic and Sports Issues in Musculoskeletal Rehabilitation (pp. 350-384). Elsevier Saunders: Missouri, 2011.
- **10.** Yamashiro, K. & **Escamilla, R.F.** <u>Proprioceptive neuromuscular facilitation.</u> In L.T. Brody, C.M. Hall, S. Bell (Eds), Therapeutic Exercise: Moving Toward Function, 3<sup>rd</sup> edition (pp. 340-354). Lippincott Williams & Wilkins: Philadelphia, 2010.
- **11. Escamilla, R.F.** Electromyographic activity during upper extremity sports. In K.E. Wilk, M.M. Reinold, & J.R. Andrews (Eds), The Athletes Shoulder (pp. 385-400). Churchill Livingstone Elsevier: Philadelphia, 2009.
- **12. Escamilla, R.F.** & Yamashiro, K.M. Open and closed kinetic chain rehabilitation for the upper extremity. In K.E. Wilk, M.M. Reinold, & J.R. Andrews (Eds), The Athletes Shoulder (pp. 603-625). Churchill Livingstone Elsevier: Philadelphia, 2009.
- **13. Escamilla, R.F.** & Wickham, R. Exercise based conditioning and rehabilitation. In G. Kolt & L. Snyder-Mackler (Eds), 2<sup>nd</sup> Edition, Physical Therapies in Sports and Exercise (pp. 149-170). Churchill Livingstone Elsevier: Philadelphia, 2007.

- **14. Escamilla, R.F.** Exercise testing and prescription. In K.P. Speer (Ed), Injury Prevention and Rehabilitation for Active Older Adults (pp. 19-47). Human Kinetics: Champaign, 2005.
- **15. Escamilla, R.F.** & Wickham, R. Exercise based conditioning and rehabilitation. In G. Kolt & L. Snyder-Mackler (Eds), Physical Therapies in Sports and Exercise. Churchill Livingstone: 2003.
- **16. Escamilla, R.F.**, Lander, J.E., & Garhammer, J. <u>Biomechanics of Powerlifting and Weightlifting Exercises</u>. In W.E. Garrett & D.T. Kirkendall (Eds), Exercise and Sport Science (pp. 585-615). Lippincott Williams & Wilkens: Philadelphia, 2000.
- 17. Fleisig, G.S., Escamilla, R.F., & Barrentine, S.W. <u>Biomechanics of pitching: mechanism and motion analysis.</u> In J.R. Andrews, B. Zarins, & K.E. Wilk (Eds.), Injuries in Baseball (pp. 3-22). Lippincott Raven: Philadelphia, 1998.
- **18.** Fleisig, G.S., **Escamilla, R.F.**, & Andrews, J.R. <u>Biomechanics of throwing</u>. In J.E. Zachazewski, D.J. Magee, & W.S. Quillen, (Eds.), Athletic Injuries and Rehabilitation (pp. 332-353). W.B. Saunders Company: Philadelphia, 1996.
- **19. Escamilla, R.F.** Normal and abnormal muscle and ligament physiology. In G.J. Sammarco (Ed.), Rehabilitation of The Foot and Ankle (pp. 77-94). Mosby: St. Louis, 1995.

#### REFERRED JOURNAL PUBLICATIONS

- 1. Escamilla, R.F. My Top Five Concepts for Selecting Lower Extremity Exercises For Cruciate Ligament and Patellofemoral Rehabilitation. International Journal of Sports Physical Therapy, In press, 2023.
- 2. Escamilla, R.F., Slowik, J.S., & Fleisig, G.F. Effects of Contralateral Trunk Tilt on Shoulder and Elbow Injury Risk and Pitching Biomechanics in Professional Baseball Pitchers. American Journal of Sports Medicine, In Press, 2023.
- **3. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Wilk, K.E., Wang, S., Yamashiro, K., & Fleisig, G.S. <u>Patellofemoral joint loading in forward lunge with step length and height variations</u>. Journal of Applied Biomechanics, 38(4):210-220, 2022.
- **4. Escamilla, R.F.**, Poage, C., Brotherton, S, MacLeod, T.D., Leddon, C., & Andrews, J.R. Kinematic and radiographic evaluation of acromioclavicular reconstruction with a synthetic ligament. Advances in Orthopedics, <a href="https://doi.org/10.1155/2022/7144209">https://doi.org/10.1155/2022/7144209</a>, Article ID 7144209, Volume 2022: 1-8, May 28, 2022.
- **5.** Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Wilk, K.E., Wang, S., Rubenstein, I., Yamashiro, K., & Fleisig, G.S. <u>Patellofemoral joint loading during the performance of the</u>

- forward and side lunge with step height variations. International Journal of Sports Physical Therapy, 17(2):174-184, 2022.
- **6.** Aguinaldo, A. & **Escamilla, R.** <u>Induced power analysis of sequential body motion and elbow valgus load during baseball pitching.</u> Sports Biomechanics, 21(7):824-836, 2022.
- 7. Aguinaldo, A. & Escamilla, R. Segmental power analysis of sequential body motion and elbow valgus load during baseball pitching: Comparison between professional and high school baseball players. Orthopaedic Journal of Sports Medicine, 7(2):1-9, 2019.
- 8. Leasure, J.M., Reynolds, K., Thorne, M., Escamilla, R.F., & Akizuki, K. <u>Biomechanical Comparison of Ulnar Collateral Ligament Reconstructions Using a Modified Docking Technique With and Without Suture Augmentation.</u> American Journal of Sports Medicine, 47(4): 928 932, 2019.
- 9. Ostrander, R., Escamilla, R.F., Hess, R., Witte, K., Wilcox, L., & Andrews, J.R. Glenohumeral rotation deficits in high school, college, & professional baseball pitchers with and without an UCL injury. Journal of Shoulder and Elbow Surgery, 28(3): 423-429, 2019.
- **10.** Misra, A.K., Escamilla, R.F. & Trivedi, N.N. <u>Throw Like a Pro V.2.0 mobile app review.</u> British Journal of Sports Medicine, 53(9): 581-582, 2019.
- **11. Escamilla, R.F.**, Slowik, J.S., Diffendaffer, A.Z., & Fleisig, G.F. <u>Differences Among Overhand</u>, Three-Quarter, and Sidearm Pitching Biomechanics in Professional Baseball <u>Players.</u> Journal of Applied Biomechanics, 34(5):377-385, 2018.
- **12. Escamilla, R.F.**, Fleisig, G.S., Groeschner, D., & Akizuki, K. <u>Biomechanical comparison among fastball, slider, curveball, and changeup pitch types and between balls and strikes in professional baseball pitchers</u>. American Journal of Sports Medicine, 45(14): 3358-3367, 2017.
- **13. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Collins, J., Lieppman, K., & Andrews, J.R. Effects of short-duration stretching drill after pitching on elbow and shoulder range of motion in professional baseball pitchers. American Journal of Sports Medicine, 45(3): 692-700, 2017.
- **14.** Oliver G.D., Washington, J., Gascon, S., Plummer, H., **Escamilla, R.**, & Andrews J. <u>Effects of hip abduction fatigue on trunk and shoulder Kinematics during throwing and passive hip rotational range of motion.</u> Journal of Sport Rehabilitation, Dec:1-28, 2017.
- **15. Escamilla, R.F.**, Lewis, C., Pecson, A., Imamura, R., & Andrews, J.R. <u>Muscle Activation</u> <u>Among Supine, Prone, and Side Position Exercises With and Without a Swiss Ball.</u> Sports Health Journal, 8(4): 372-379, 2016.

- **16. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Dunning, R., Grover, M., Kenniston, M., Loera, J., Tanasse, T., Paulos, L., & Andrews, J.R. <u>Electromyographic analysis of the shoulder while performing exercises using the bodyblade device</u>. International Journal of Sports Physical Therapy, 11(2): 175-189, 2016.
- **17.** Fleisig, G.S., Leddon, C., Laughlin, W., Ciccotti, M., Mandelbaum, B., Aune, K., **Escamilla**, R.F., MacLeod, T.D., Andrews, J.R. <u>Biomechanics of baseball pitchers with history of ulnar collateral ligament reconstruction</u>. American Journal of Sports Medicine, 43(5): 1045-1050, 2015.
- **18. Escamilla, R.F.,** Hooks, T.R, & Wilk, K.E. <u>Optimal Management of Shoulder Impingement Syndrome.</u> Open Access Journal of Sports Medicine, 5: 13-24, 2014.
- **19. Escamilla, R.F.**, MacLeod, T.D., Wilk, K.E., Paulos, L. & Andrews, J.R. <u>Cruciate ligament loading during common knee rehabilitation exercises</u>. Journal of Engineering and Medicine, 226(9): 670-680, 2012.
- **20. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. Comparison of three baseball-specific six-week training programs on throwing velocity in high school baseball players. Journal of Strength and Conditioning Research, 26(7): 1767-1781, 2012.
- **21. Escamilla, R.F.**, MacLeod, T.D., Wilk, K.E., Paulos, L. & Andrews, J.R. <u>Anterior cruciate ligament strain and tensile forces for weight bearing and non-weight bearing exercises: a guide to exercise selection</u>. Journal of Orthopaedic and Sports Physical Therapy, 42(3): 208-220, 2012.
- **22. Escamilla, R.F.,** Fleisig, G.S., Yamashiro, K., Mikla, T., Dunning, R., Paulos, L., & Andrews, J.R. Effects of a 4-week youth baseball conditioning program on throwing velocity. Journal of Strength and Conditioning Research, 24(12): 3247-3254, 2010.
- **23.** Escamilla, R.F., Zheng, N., Imamura, R., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, Paulos, L., & Andrews, J.R. <u>Cruciate ligament tensile forces between a short-step and long-step forward lunge</u>. Medicine and Science in Sports and Exercise, 42(10):1932-1942, 2010.
- **24. Escamilla, R.F.**, Lewis, C., Bell, D, Bramblet, G., Daffron, J., Lambert, S., Pecson, A., Imamura, R., Paulos, L., & Andrews, J.R. <u>Core muscle activation in swiss ball exercises compared to traditional abdominal exercises.</u> Journal of Orthopaedic and Sports Physical Therapy, 40(5):265-276, 2010.
- **25.** DeRenne, C., Morgan, C.F., **Escamilla, R.F.**, Fleisig, G.S. <u>A Choke-Up Grip Facilitates Faster Swing and Stride Times Without Compromising Bat Velocity and Bat Control.</u> The Sports Journal, 13(2): 2010.

- **26. Escamilla, R.F.**, Zheng, N., Imamura, R., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, Paulos, L., & Andrews, J.R. <u>Cruciate ligament tensile forces during the forward and side lunge.</u> Clinical Biomechanics, 25(3): 213-221, 2010.
- **27.** Escamilla, R.F., Yamashiro, K., Paulos, L., & Andrews, J.R. Shoulder Muscle Activity and Function in Common Shoulder Rehabilitation Exercises. Sports Medicine, 39(8): 663-685, 2009.
- **28.** Escamilla, R.F. & Andrews, J.R. Shoulder muscle recruitment patterns and related biomechanics during upper extremity sports. Sports Medicine, 39(7): 569-590, 2009.
- **29.** Escamilla, R.F., Fleisig, G.S., DeRenne, C., Taylor, M.K., Moorman, C.T., Imamura, R., Barakatt, E, & Andrews, J.R. Effects of bat grip on baseball hitting kinematics. Journal of Applied Biomechanics, 25: 203-209, 2009.
- **30. Escamilla, R.F.,** Fleisig, G.S., DeRenne, C., Taylor, M.K., Moorman, C.T., Imamura, R., Barakatt, E, & Andrews, J.R. <u>A comparison of age level on baseball hitting kinematics</u>. Journal of Applied Biomechanics, 25: 210-218, 2009.
- **31. Escamilla, R.F.**, Zheng, N., Imamura, R., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral compressive force and stress during the one leg squat and wall squat.</u> Medicine and Science in Sports and Exercise, 41(4): 879-888, 2009.
- **32.** Reinold, M.M., Escamilla, R.F., Wilk, K.E. <u>Current Concepts in the Scientific and Clinical Rationale behind Glenohumeral and Scapulothoracic Exercises</u>. Journal of Orthopaedic & Sports Physical Therapy, 39(2): 105-117, 2009
- **33. Escamilla, R.F.**, Zheng, N., Imamura, R., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Cruciate ligament force during the wall squat and one leg squat.</u> Medicine and Science in Sports and Exercise, 41(2): 408-417, 2009.
- **34. Escamilla, R.F.**, Zheng, N., Imamura, R., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral compressive force and stress between a short and long step forward lunge</u>. Journal of Orthopaedic & Sports Physical Therapy. 38(11): 681-690, 2008.
- **35. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Imamura, R. <u>Patellofemoral compressive force and stress during the forward and side lunge with and without stride.</u> Clinical Biomechanics, 23(8): 1026-1037, 2008.

- **36.** Hreljac, A., Imamura, R.T., **Escamilla, R.F.**, Edwards, W.B., & MacLeod, T. <u>The</u> relationship between joint kinetic factors and the walk-run gait transition speed during human <u>locomotion</u>. Journal of Applied Biomechanics, 24(2): 149-157, 2008.
- **37.** Imamura, R., Iteya, M., Hreljac, A., & **Escamilla, R.F.** A Kinematic comparison of the judo throw h*arai-goshi* during competitive and non-competitive conditions. Journal of Sports Science & Medicine, 6(2): 15-22, 2007.
- **38.** Hreljac, A, Imamura, R.T., **Escamilla, R.F.**, & Edwards, W.B. When does a gait transition occur during human locomotion. Journal of Sports Science & Medicine, 6(1): 36-43, 2007.
- **39.** Hreljac, A., Imamura, R., **Escamilla, R.F.**, & Edwards, W.B. <u>Effects of changing protocol</u>, grade, and direction on the preferred gait transition speed during human locomotion. Gait and Posture, 25(3): 419-424, 2007.
- **40. Escamilla, R.F.**, Barrentine, S.W., Fleisig, G.S. Zheng, N., Takada, Y., Kingsley, D., & Andrews, J.R. <u>Pitching biomechanics as a pitcher approaches muscular fatigue during a simulated baseball game</u>. American Journal of Sports Medicine, 35(1): 23-33, 2007.
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# CONFERENCE ABSTRACTS/PROCEEDINGS

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- **38. Escamilla, R.F.** Weighted baseballs and long toss biomechanics for healthy pitchers. 1<sup>st</sup> Annual San Francisco Sports Medicine Conference. San Francisco, CA, January 2015.
- **39. Escamilla, R.F.** Which exercise are most effective in recruiting glenohumeral and scapulothoracic muscles. 1<sup>st</sup> Annual San Francisco Sports Medicine Conference. San Francisco, CA, January 2015.
- **40.** Escamilla, R.F. (invited keynote speaker). <u>Strengthening exercises for the core.</u> 2<sup>nd</sup> Annual <u>International Congress of Physiotherapy of the Bahia (II CIFIBA)</u>, Porto Seguro, Brazil, November 2014.

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- **52.** Escamilla, R.F. Weighted baseballs and long toss biomechanics. 32<sup>nd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2014.
- **53.** Escamilla, R.F. Six-week core training program for high school baseball players. 32<sup>nd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2014.
- **54.** Escamilla, R.F. Anterior cruciate ligament: weight bearing and non-weight bearing exercises. IV IBRAMED International Scientific Meeting, Amparo, Brazil, October 2013.
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- **56. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Comparison of three baseball-specific six week training programs on trunk strength and power in high school baseball players.</u> 2013 California Physical Therapy Association Annual Conference, Pasadena, CA, September 2013.
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- **59. Escamilla, R.F.**, Carinci, J,M., Barakatt, E., Broyer, P., Butler, C., Ferguson, J., Morgan, A., Morales, R., Rhoads, R. <u>Electromyographic Analysis of Trunk and Hip Muscles During Swiss Ball Bridging Exercises Performed With Two Different Ankle Positions.</u> Medicine and Science in Sports and Exercise, 44(5S 2970): 776, 2012.
- **60. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Strength and power development in baseball training programs.</u> 2012 California Physical Therapy Association Annual Conference, Santa Clara, CA, September 2012.

- **61. Escamilla, R.F.** & Andrews, J.R. <u>SLAP injuries and the role of the biceps in the overhead throwing athlete.</u> The American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting, Baltimore, MD July 2012.
- **62. Escamilla, R.F.** Biomechanics and pathomechanics of the throwing shoulder. 30<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2012.
- **63. Escamilla, R.F**. <u>Biomechanics and pathomechanics of the throwing elbow</u>. 30<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2012.
- **64. Escamilla, R.F.** Shoulder biomechanics during throwing. Southwest Chapter 30<sup>th</sup> Annual Meeting of the American College of Sports Medicine. Reno, NV, Sept 2011.
- **65. Escamilla, R.F**. & Andrews, J.R. <u>Biomechanics of the long biceps brachii in the throwing shoulder.</u> The American Orthopaedic Society for Sports Medicine 2011 Annual Conference. San Diego, CA, July 2011.
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- **68. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Dunning, R., Grover, M., Kenniston, M., Loera, J., Tanasse, T., Paulos, L., & Andrews, J.R. <u>An electromyographic analysis of the shoulder while performing exercises using the bodyblade classic and pro.</u> Medicine and Science in Sports and Exercise, 42(5): S482, 2010.
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- **70.** Escamilla, R.F. Knee Ligament loading for lower extremity exercises. Sports Medicine Symposium of the Americas, Houston, TX June 2010
- 71. Escamilla, R.F. <u>Plyometric training transition from rehab to strength and conditioning.</u> Sports Medicine Symposium of the Americas, Houston, TX June 2010
- **72. Escamilla, R.F.** <u>Principles and adaptations of resistance training.</u> Sports Medicine Symposium of the Americas, Houston, TX June 2010

- **73.** Escamilla, R.F. Cruciate ligament loading for lower extremity exercises. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- **74.** Escamilla, R.F. <u>Lifting technique affects knee joint loading and potential injury</u>. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- **75. Escamilla, R.F.** How to protect your patellofemoral joint while strengthening your lower extremity. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- **76. Escamilla, R.F.** Comparison of three resistance training programs on shoulder strength and power. 28<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2010.
- 77. Escamilla, R.F. <u>Training programs that increase throwing velocity</u>. 28<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2010.
- **78. Escamilla, R.F.** Principles and adaptations of resistance training. 2009 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Las Vegas, NV Dec 2009.
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- **91. Escamilla, R.F.** Essentials of strength and conditioning symposium. 2008 California Physical Therapy Association Annual Conference, Oakland, CA, September 2008.
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- **194. Escamilla, R.F.**, Fleisig, G.S., & Andrews, J.R. <u>The biomechanical difference between throwing a baseball and throwing a football</u>. 2<sup>nd</sup> Annual Injuries in Football and Wrestling Course, American Sports Medicine Institute, Birmingham, AL, May 1993.
- 195. Escamilla, R.F. Periodization and weight training techniques for football and wrestling. 2<sup>nd</sup> Annual Injuries in Football and Wrestling Course, American Sports Medicine Institute, Birmingham, AL, May 1993.
- **196. Escamilla, R.F.**, Fleisig, G.S., & Andrews, J.R. <u>Biomechanical comparison of baseball and football throwing</u>. 11<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1993.
- **197. Escamilla, R.F.**, Fleisig, G.S., & Andrews, J.R. <u>A kinematic and kinetic comparison between baseball pitching and football passing</u>. Medicine and Science in Sports and Exercise, 25(5):S131, 1993.

- 198. Escamilla, R.F. Proper techniques, periodization, and biomechanical differences between weight training for football vs. powerlifting. 1st Annual Injuries in Football Course, American Sports Medicine Institute, Birmingham, AL, May 1992.
- 199. Escamilla, R.F. & Sawhill, J. <u>Cinematographical examination of powerlifting aids in squatting.</u> Proceedings of the sixth International Symposium on Biomechanics in Sports. In Kreighbaum, E. & McNeill (eds.), Biomechanics in Sports VI, The International Society of Biomechanics in Sports: 207-223, Bozeman, MT, 1990.

# **VIDEO PUBLICATIONS**

1. Fleisig, G.S., Andrews, J.R., Dillman, C.J., **Escamilla, R.F.**, Thurston, B., Kuerten, B., Whiteside, J.A., & Wilk, K.E. <u>The fine art of pitching and throwing</u>. Emerald Coast Productions, American Sports Medicine Institute, 1993.

# **EDUCATIONAL PUBLICATIONS**

Andrews, J.R., Chmielewski, T., **Escamilla, R.F.**, Fleisig, G.S., Wilk, K.E. <u>Conditioning</u> <u>program for professional baseball pitchers.</u> American Sports Medicine Institute, Birmingham, AL, 1997.

# **FUNDED RESEARCH GRANTS/PROJECTS**

- 1. Escamilla, R.F. \$7,500 awarded April 2022. Grant Organization: Health and Human Services Faculty 2022 Summer Fellowship. Title: Comparison in Patellofemoral Joint Loading Between Wall and Ball Squat Exercises.
- **2. Escamilla, R.F.** \$7500 awarded March 2022. Grant Organization: CSUS Research and Creative Activity Award Program, California State University, Sacramento, CA. Title: Cruciate Ligament Loading in Forward Lunge with Step Length and Height Variations.
- **3. Escamilla, R.F.** \$7500 awarded March 2021. Grant Organization: CSUS Research and Creative Activity Award Program, California State University, Sacramento, CA. Title: Patellofemoral Joint Loading in Forward Lunge with Step Length and Height Variations.
- **4. Escamilla, R.F.** \$7,500 awarded April 2021. Grant Organization: Health and Human Services Faculty 2021 Summer Fellowship. Title: <u>Cruciate Ligament Loading in Side and Forward Lunge with Height Variations.</u>
- **5.** Escamilla, R.F. \$5,000 awarded April 2019. Grant Organization: Health and Human Services Faculty 2021 Summer Fellowship. Title: Patellofemoral Joint Loading Performing the Forward and Side Lunge with Step Height Variations

- **6. Escamilla, R.F.** \$4,400 awarded April 2018. Grant Organization: Health and Human Services Faculty 2018 Summer Fellowship. Title: Biomechanical Loading of the Knee Joint While Performing a Ball Squat Exercise With Technique and Resistance Variations.
- 7. Escamilla, R.F. \$7,500 awarded April 2017. Grant Organization: Health and Human Services Faculty 2017 Summer Fellowship. Title: Peak loading of the Patellofemoral Joint While Performing the Forward Lunge with a Long and Short Step on a Flat surface and up to a 4 inch Platform.
- **8. Escamilla, R.F.** \$10,000 awarded April 2016. Grant Organization: Health and Human Services Faculty 2016 Summer Fellowship. Title: <u>Development of a Health and Fitness Center.</u>
- **9. Escamilla, R.F.**, MacLeod, T.D., Zheng, N. \$7,500 awarded April 2016. Grant Organization: Health and Human Services Faculty 2016 Summer Fellowship. Title: <u>Knee Biomechanics While Performing Therapeutic Exercises on Unstable and Stable Surfaces.</u>
- 10. Escamilla, R.F. \$5000 awarded April 2015. Grant Organization: Provost's Research Incentive Fund, California State University, Sacramento, Office of research Affairs. Title: <u>Cruciate Ligament Loading in Lower to Higher Intensity Plyometric Exercises Used in Females During Rehabilitation After ACL Reconstruction Surgery,</u>
- 11. Leddon, C., Fleisig, G.S. **Escamilla, R.F.**, Ciccotti, MD, Mandelbaum, BR, Aune, KT MacLeod, T.D., Andrews, J.R. \$143,080 awarded February 2014. Grant Organization: Major League Baseball. Title: <u>A comparison of pitching biomechanics in professional pitchers with a history of ulnar collateral ligament reconstruction versus a non-surgical group.</u>
- 12. **Escamilla, R.F.** & Yamashiro, K. \$2500 awarded April 2013. Grant Organization: Educational Grant co-sponsored by Kaiser Permanente and California State University, Sacramento to put together and present a physical therapy education course. Title: <u>Advanced Concepts In Knee Rehabilitation</u>.
- 13. **Escamilla, R.F.** & Yamashiro, K. \$2750 awarded April 2012. Grant Organization: Educational Grant co-sponsored by Kaiser Permanente and California State University, Sacramento to put together and present a physical therapy education course. Title: <u>Treating the Overhead Athlete: Biomechanics, Pathology, and Rehabilitation of the Shoulder and Elbow.</u>
- 14. **Escamilla, R.F** & Parker, D. \$5000 awarded October 2012. Grant Organization: Intelliskin, L.L.C., Newport Beach, CA. Title: <u>Effects of Wearing Posture Shirt on cardiorespiratory VO<sub>2</sub> Max and running performance</u>.
- **15. Escamilla, R.E.** \$9805 awarded September 2010. Grant Organization: Blu Sky Solutions, LLC Rotex, Opelousas, LA. Title: <u>Core and Hip Muscle Recruitment Pattern Between the Rotex Device and Common Hip Rotation Rehabilitation Exercises</u>.

- **16. Escamilla, R.F.** \$11,000 awarded April 2009. Grant Organization: EARDA CSUS Pilot Grant, California State University, Sacramento, College of Health and Human Services, Sacramento, CA. Title: Knee Forces and Muscle Activity During Squatting Exercises on Stable and Unstable Surfaces.
- **17. Escamilla, R.F.** \$7251 awarded March 2008. Grant Organization: CSUS Research and Creative Activity Award Program, California State University, Sacramento, CA. Title: <u>Knee Biomechanics During Forward and Backwards Lunging</u>.
- **18. Escamilla, R.F.** \$13,166 awarded April 2007. Grant Organization: CSUS Research and Creative Activity Award Program, California State University, Sacramento, CA. Title: Knee Biomechanics During Common Weight Bearing Knee Rehabilitation Exercises.
- **19. Escamilla, R.F.** \$7000 awarded October 2007. Grant Organization: EARDA CSUS Pilot Grant, California State University, Sacramento, College of Health and Human Services, Sacramento, CA. Title: Knee Biomechanics During Common Lower Extremity Rehabilitation Exercises.
- **20. Escamilla, R.F.** \$7000 awarded September 2006. Grant Organization: EARDA CSUS Pilot Grant, California State University, Sacramento, College of Health and Human Services, Sacramento, CA. Title: Knee Forces and Muscle Activity During Common Lower Extremity Rehabilitation Exercises.
- **21. Escamilla, R.F.** \$11,590 awarded September 2005. Grant Organization: CSUS Research and Creative Activity Award Program, California State University, Sacramento, CA. Title: Muscle Activation Patterns in Abdominal Exercises with Rehabilitation and Training Implications.
- **22. Escamilla, R.F.**, Simovitch, R.W., & Moorman, C.T, III. \$5000 awarded March 2002. Grant Organization: Piedmont Grant, Duke University Medical Center, Orthopaedic Surgery, Durham, NC. Title: Biomechanical analysis of the bench press with technique variations and injury implications.
- **23.** Fleisig, G.S., **Escamilla, R.F.**, Nicholls, R.L., & Elliott, B.C. \$26,680 awarded April 1999. Grant Organization: Grant Organization: International Olympic Committee Subcommission on Biomechanics and Physiology to conduct research at the 2000 Centennial Olympic Games, Sydney, Australia. Title: Fatigue and implications for injury in tennis serving.
- **24. Escamilla, R.E**. \$4500.00 awarded February 1998. Grant Organization: University Services Summer Grant, Cal Poly, San Luis Obispo, CA. Title: <u>Biomechanics of the knee during rehabilitation exercise</u>.
- **25. Escamilla, R.E.** \$5000.00 awarded April 1997. Grant Organization: University Services Summer Grant, Cal Poly, San Luis Obispo, CA. Title: <u>Biomechanics of the knee during</u> closed and open kinetic chain exercises.

- **26.** Fleisig, G.S., **Escamilla, R.F.**, Barrentine, S.W., & Zheng, N. \$5000 awarded February 1995. Grant Organization: International Olympic Committee Subcommission on Biomechanics and Physiology of Sport to conduct research at the 1996 Centennial Olympic Games, Atlanta, GA. Title: <u>Biomechanical comparisons of Olympic baseball pitchers and Olympic tennis.</u>
- **27.** Fleisig, G.S., Barrentine, S.W., & **Escamilla, R.F.** \$66,500 awarded April 1993. Grant Organization: Titleist and Foot-Joy Worldwide, Fairhaven, MA. Title: <u>Biomechanical</u> differences between Classic and Dry-Joy golf shoes during a golf swing.
- 28. Fleisig, G.S., **Escamilla, R.F.**, & Barrentine, S.W. \$17,500.00 awarded March 1992. Grant Organization: Chicago White Sox Professional Baseball Organization, Chicago, IL. Title: Biomechanics of baseball pitching,
- 29. **Escamilla, R.F.**, Fleisig, G.S., & Dillman, C.J. \$10,000.00 awarded October 1991. Grant Organization: The Rocker, Professional Products, Inc., Defuniak Springs, FL. Title: <u>The</u> "rocker" exercise: A study of muscular Involvement.

# NON-FUNDED RESEARCH GRANTS/PROJECTS

- **1. Escamilla, R.F.** \$5,000 requested April 2016. Grant Organization: Research & Creative Activity (RCA) Faculty Awards Program. Title: <u>Cruciate Ligament Loading and Muscle Recruitment Patterns During Common Lower Extremity Exercises.</u>
- 2. Escamilla, R.F., Ostrander, R., Jordan, S, Leddon, C., LaPlante, S., MacLeod, T.D., Winnier, S., Stark, P.H., Yamashiro, K. \$149,491 requested September 2015. Grant Organization: OREF Prospective Clinical Research Grant. Title: Effect of an 8-Week Neuromuscular Training Program Beginning 20 Weeks After ACL Reconstruction on ACL Re-Injury Risk Factors in High School and College Female Soccer, Volleyball, and Basketball Players.
- 3. Escamilla, R.F., Leddon, C., LaPlante, S., MacLeod, T.D., Winnier, S., Stark, P.H., Yamashiro, K. \$77,525 requested August 2015. Grant Organization: Magistro Family Foundation Research Grant. Title: Effect of an 8-Week Neuromuscular Training Program Beginning 20 Weeks After ACL Reconstruction on ACL Re-Injury Risk Factors in High School and College Female Soccer, Volleyball, and Basketball Players.
- **4. Escamilla**, **R.F.**, Mikla, T., LaPlante, S., Stark, P.H., Jensen, R.P. \$17,452 requested March 2015. Grant Organization: NSCA Senior Investigator Grant. Title: Shoulder EMG Between Rotator Cuff and Kettlebell Exercises at Two Intensities.
- **5.** Escamilla, R.F., Ostrander, R., Forster, S., McLeod, T.D., Torburn, L., Jenson, S., Winnier, S. \$99,620 requested March 2015. Grant Organization: Orthopaedic Research and

Education Foundation. Title: <u>Muscular activation in the medial elbow during pitching in collegiate and high school athletes</u>.

# **CURRENT RESEARCH ACTIVITY**

- 1. **Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. Comparison of three baseball-specific six-week training programs on shoulder strength and power in high school baseball players. Journal of Strength and Conditioning Research. In Press.
- 2. **Escamilla, R.E.**, Falsone, S., Ionne, M., Smith, S. Beach, T., Frost, D., Paulos, L., & Andrews, J.R. An Electromyographic Analysis of the Shoulder While Performing Wall Slide and Wall Walk Exercises. Internal Funding.
- 3. **Escamilla, R.E.**, Falsone, S., Ionne, M., Smith, S. Beach, T., Frost, D., Paulos, L., & Andrews, J.R. An Electromyographic Analysis of the Shoulder While Performing Open and Closed Chain Scaption Exercises. Internal Funding.
- 4. **Escamilla, R.E.**, Falsone, S., Ionne, M., Smith, S. Beach, T., Frost, D., Paulos, L., & Andrews, J.R. An Electromyographic Analysis of the Shoulder While Performing Scaption Exercises With Varying Grip Intensities. Internal Funding.
- 5. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Patellofemoral Compressive Force & Stress Between the Powercleans and Snatch. Internal Funding.
- 6. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Cruciate Ligament Force Between the Powercleans and Snatch. Internal Funding.
- 7. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Patellofemoral Compressive Force & Stress Between Back and Front Barbell Squats. Internal Funding.
- 8. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Cruciate Ligament Force Between Back and Front Barbell Squats. Internal Funding.
- 9. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Patellofemoral Compressive Force & Stress Between Sumo and Conventional Deadlifts. Internal Funding.

- 10. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Cruciate Ligament Force Between Sumo and Conventional Deadlifts. Internal Funding.
- 11. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Patellofemoral Compressive Force & Stress Between Forward and Backward Lunges. Internal Funding.
- 12. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Cruciate Ligament Force Between Forward and Backward Lunges. Internal Funding.
- 13. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Patellofemoral Compressive Force & Stress Between Plyometric Exercises. Internal Funding.
- 14. **Escamilla, R.E.**, Beach, T., Frost, D., Zheng, N., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Barnett, Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Cruciate Ligament Force Between Plyometric Exercises. Internal Funding.
- 15. **Escamilla, R.E.**, Zheng, N., Beach, T., Frost, D., Wang, H., (possibly MacLeod, T.D.), Ionno, M., Fleisig, G., Wilk, K., Paulos, L., & Andrews, J.R. Knee Biomechanics During the Golf Swing involving a variety of swinging different golf clubs. Internal Funding.
- 16. **Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L., & Andrews, J.R. Comparison of three baseball-specific six-week training programs on trunk strength and power in high school baseball players. Internal Funding.
- 17. **Escamilla, R.F.,** Electromyographic Analysis of the Hip while Performing Exercises Using the Closed chain Rotex Device versus traditional open chain elastic tubing. Internal Funding.
- 18. MacLeod, T.D., **Escamilla, R.F.**, & Imamura, R. Patellofemoral Compressive Force & Stress Between Squatting on Flat Versus Unstable Surface. Internal Funding.
- 19. MacLeod, T.D., **Escamilla, R.F.**, & Imamura, R. Cruciate Ligament Force Between Squatting on Flat Versus Unstable Surface. Internal Funding.
- 20. **Escamilla, R.F.**, MacLeod, T.D., & Imamura, R. Patellofemoral Compressive Force & Stress Between Ball Squat and Wall Squat Exercises. Internal Funding.
- 21. **Escamilla, R.F.**, MacLeod, T.D., & Imamura, R. Cruciate Ligament Force Between Ball Squat and Wall Squat Exercises. Internal Funding.

- 22. **Escamilla, R.F.**, MacLeod, T.D, & Imamura, R. Patellofemoral Compressive Force & Stress Between Lunging Between Flat Versus Elevated Surfaces. Internal Funding.
- 23. **Escamilla, R.F.**, MacLeod, T.D., & Imamura, R. Cruciate Ligament Force Between Lunging Between Flat Versus Elevated Surfaces. Internal Funding.

#### **CONSULTATIONS AND CLINICS**

- 1. Program coordinator and speaker for the San Francisco Giants First and Second Annual Sports Medicine Conferences. San Francisco, CA, January 2015 and January 2016.
- 2. Sports Medicine and Biomechanics Research. The Andrews Research and Education Institute, Gulf Breeze, FL, 2013 to current
- 3. Biomechanical Pitching Evaluations. San Francisco Giants Professional Baseball Organization, San Francisco, CA, 2010 current.
- 4. Biomechanics of Speed. Director: Dr. Ken Jones. NSCA Alabama-Northern Florida In-Season Football Clinic, Samford University, Birmingham, AL, July 1995.
- 5. Sports Medicine and Science Camp Seminar: Weight training and biomechanics. Camp Director: Ronald A. Feinstein, M.D. Sponsored by The American Sports Medicine Institute and Schaeffer Eye Clinic, Birmingham, AL, June 1995 1997.
- 6. Seminar for Alabama State Correctional Officers: <u>Health, Fitness, and Exercise</u>. Hired by OuestCare, Dr. Richard McLaughlin Medical Director, Birmingham, AL, February 1994.
- 7. <u>Strength and conditioning specialist</u> for HealthSouth Strengthening and Conditioning Camp, Birmingham, AL, June 1994.

## **SCIENTIFIC AND PROFESSIONAL PRESENTATIONS:**

- Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Wilk, K.E., Yamashiro, K., Escamilla, I.M., & Fleisig, G.S. <u>Patellofemoral joint loading during the wall and ball squat with heel-to-wall-distance variations.</u> 2023 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, Denver, CO, June 2023.
- **2.** Escamilla, R.F. Strengthening and knee loading during lunge and squat exercises. 41<sup>st</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Plano, TX, January 2023

- 3. Escamilla, R.F. Goldberg Mueller Keynote Address on Injury Prevention: Prevention of UCL injuries in baseball pitchers. 41st Annual Injuries in Baseball Course, American Sports Medicine Institute, Plano, TX, January 2023
- **4.** Escamilla, R.F. Pathomechanics of the overhead throwing shoulder and elbow. 2022 Twin Cities Orthopedics Baseball Medicine Conference, St Paul, MN, November 2022.
- **5.** Escamilla, R.F. <u>Using weighted balls for performance enhancement.</u> 2022 Twin Cities Orthopedics Baseball Medicine Conference, St Paul, MN, November 2022.
- **6.** Escamilla, R.F. Designing a weighted ball program for the youth thrower. 2022 Twin Cities Orthopedics Baseball Medicine Conference, St Paul, MN, November 2022.
- 7. Escamilla, R.F. & Aguinaldo, A. Epidemic of UCL Injuries in Adult and Youth Baseball Pitchers Causes and Prevention Strategies. 2022 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, San Diego, CA, June 2022.
- 8. Escamilla, R.F., Yamashiro, K., MacLean, D., Asuncion, R. McKeough, M. Comparison of Four Quick and Reliable Methods of Assessing Body Fat Appropriate for Clinical Settings Among Young, Middle-Age, and Older Healthy Male and Female White Adults. 2022 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, San Diego, CA, June 2022.
- 9. Lazaro, R.T, McKeough, M., Escamilla, R.F., Helboch, S., Bradford, J., & Deamaral, J. <u>Development of a community-based balance and fall prevention program -implementation during the covid-19 pandemic.</u> 2022 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, San Diego, CA, June 2022.
- **10. Escamilla, R.F.** Clinically appropriate methods for assessing body composition. Spring 2022 Health and Human Service Research Colloquium, College of Health and Human Services, Sacramento State University, Sacramento, CA, April 2022.
- 11. Escamilla, R.F. <u>Health-Related Fitness to Enhance Function and Decrease Risk of Cardiovascular Disease</u>. 25<sup>th</sup> Annual McGinty Continuing Educational Seminar. Department of Physical Therapy, Sacramento State University, Sacramento, CA, April 2022
- **12. Escamilla, R.F.**, Wilk, K.E., Yamashiro, K. <u>Rehabilitation Following Selected Shoulder Surgeries</u>. 40<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Virtual, January 2022
- **13. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Wilk, K.E., Yamashiro, K., Fleisig, G.S. Patellofemoral joint loading in forward lunge rehabilitation exercises. 2021

- Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine (Virtual), June 2021.
- 14. Lazaro, R. Escamilla, R.F., McKeough, M., Hersey, M. The effects of 12 weeks of exercise adherence on body composition, muscular strength, power and endurance, agility, fall risk, walking speed, flexibility, and cardiorespiratory fitness in older healthy adults. 2021 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine (Virtual), June 2021.
- **15. Escamilla, R.F.** Biomechanical Aspects of QB versus Pitcher or Dual Throwers in High School: Good or Bad. Andrews Institute Injuries in Football Virtual Course, May 2021.
- **16. Escamilla, R.F.** Shoulder and Elbow Biomechanics and Common Injuries in Overhead Throwing. California Student Conclave (Virtual), March 2021.
- **17. Escamilla, R.F.** Elbow Biomechanics of the Overhead Throwing Athlete. Duke Sports Medicine Baseball Symposium (Virtual), January 2021.
- **18. Escamilla, R.F.** <u>Plyometrics for the thrower</u>. 39<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Virtual, January 2021.
- 19. Escamilla, R.F., Lazaro, R., Yamashiro, K, McLean, D., Asuncion, R, McKeough, M. The effects of 12 weeks of exercise compliance versus non-compliance on body composition, muscular strength, power and endurance, agility, fall risk, walking speed, flexibility, and cardiorespiratory fitness in older healthy adults. 2020 California Physical Therapy Association Annual Conference (Virtual), October 2020.
- 20. Escamilla, R.E., Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Wilk, K.E., Fleisig, G.S. Patellofemoral joint loading performing the forward and side lunge with step height variations. 2020 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine (Virtual), June 2020.
- **21.** Lazaro, R., McKeough, M., **Escamilla, R.E**. Three methods of Assessing body fat in healthy older adults. 2020 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine (Virtual), June 2020.
- **22.** Escamilla, R.F. Cruciate Ligament & Patellofemoral Loading during Weight Bearing and Non-Weight Bearing Exercises. 1st Annual Brazilian Physiotherapy Conference, Sao Paulo, Brazil, May 2020.

- **23.** Escamilla, R.F. <u>Pitching Mechanics on a Dirt Mound Versus a Turf Mound.</u> 38<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2020.
- **24. Escamilla, R.F.** Best Evidence-Based Exercises for the Throwing Shoulder. 38<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2020.
- **25. Escamilla, R.F.** Weighted Ball Throwing Programs: Are they safe and effective? 38<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2020.
- **26. Escamilla, R.F.** (invited speaker) <u>Biomechanics and pathology of the throwing shoulder and elbow in the athletic population.</u> Charles University Physiotherapy Workshop, Prague, Czech Republic, November 2019.
- **27.** Aguinaldo, A. & **Escamilla, R.E.** <u>Induced power analysis of sequential body motion and elbow valgus load during baseball pitching.</u> 2019 International Society of Biomechanics Annual Meeting, Calgary, Alberta, Canada, July-August 2019.
- 28. Escamilla, R.E. Ostrander, R., Hess, R., Witte, K., Wilcox, L., & Andrews, J.R. Glenohumeral rotation deficits in high school, college, & professional baseball pitchers with and without an UCL injury. 2019 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, Orlando, FL, May June 2019.
- **29. Escamilla, R.F.** Resistance training programs: are they safe and effective in enhancing throwing velocity? 37<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2019.
- **30.** Escamilla, R.F. <u>How mound slopes affects pitching mechanics</u>. 37<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2019.
- **31. Escamilla, R.F**. Elbow Biomechanics and Rehab of the Overhead Throwing Athlete. 2019 American Physical Therapy Association Combined Sections Meetings, Washington, DC, January 2019.
- **32. Escamilla, R.F.** Elbow Biomechanics and Pathology in the Overhead Throwing Athlete. 5<sup>th</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2019.
- **33. Escamilla, R.F.** Shoulder Biomechanics and Pathology in the Overhead Throwing Athlete. 5<sup>th</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2019.

- **34. Escamilla, R.F.** <u>Differences among overhand, three-quarter, and sidearm pitching biomechanics in professional baseball players.</u> 5<sup>th</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2019.
- **35. Escamilla, R.F.,** McKeough, DM, Lazaro, RT, DeSilva, T, Endow, W, McCandless, C, Terrill, B. <u>Community-based health and wellness with aging: the beginning of a longitudinal study</u>. 2018 Aging in America Conference, American Society of Aging. San Francisco, CA, March 2018.
- **36. Escamilla, R.E.** Weight loss through Exercise. Renaissance Society, Sacramento, CA, September 2018.
- **37. Escamilla, R.E.,** Yamashiro, K, McLean, D., Asuncion, R, McKeough, M. <u>Four Methods of Assessing Body Fat in 60 Seconds or Less in Young, Middle Age, and Older Healthy Adults.</u> Eighth International Conference on Health, Wellness & Society, London, England, September 2018.
- **38.** Aguinaldo, A & Escamilla, R.E. Relationship of segmental energy flow and elbow valgus loading during baseball pitching. International Sports Biomechanics Society (ISBS) 2018 Annual Conference, Auckland, New Zealand, September 2018.
- **39. Escamilla, R.F.** Peak Patellofemoral and ACL/PCL Forces While Performing the Forward Lunge with Varying Techniques. 2018 Sacramento State University Research Symposium, Sacramento, CA, March 2018.
- **40. Escamilla, R.F.** Epidemic, Epidemiology, and Risk Factors of UCL Injuries. 2018 American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2018.
- **41. Escamilla, R.F.** Biomechanics and Pathology of the Overhead Throwing Elbow. 2018 American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2018.
- **42. Escamilla, R.F.** Outcomes After UCL Reconstruction. 2018 American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2018.
- **43. Escamilla, R.F.** Biomechanics and Pathology of the Overhead Throwing Shoulder. 2018 American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2018.
- **44. Escamilla, R.F.** Re-Injury Rates of Post-Op ACL Reconstruction and Re-Injury Prevention Strategies. 2018 American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2018.

- **45. Escamilla, R.F.** <u>Biomechanics of the throwing shoulder</u>. 36<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2018.
- **46. Escamilla, R.F.** The 2 Out Program: What Is It and Is It Effective? 36<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2018.
- **47. Escamilla, R.F.,** Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., Andrews, J.R. <u>Biomechanical comparison among various pitch types in professional baseball pitchers</u>. The 8th Asia-Pacific Congress on Sports Technology, Tel Aviv, Israel, October 2017.
- **48. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Dunning, R., Grover, M., Kenniston, M., Loera, J., Tanasse, T., Paulos, L., & Andrews, J.R. <u>An electromyographic analysis of the shoulder while performing exercises using different types of bodyblade devices and exercises.</u> The 8th Asia-Pacific Congress on Sports Technology, Tel Aviv, Israel, October 2017.
- **49. Escamilla, R.F.,** Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., Andrews, J.R. <u>Peak patellofemoral force and stress during lunging with technique variations.</u> The 8th Asia-Pacific Congress on Sports Technology, Tel Aviv, Israel, October 2017.
- **50. Escamilla, R.F.**, Carinci, J,M., Barakatt, E., Broyer, P., Butler, C., Ferguson, J., Morgan, A., Morales, R., Rhoads, R. <u>Electromyographic muscle analysis during swiss ball bridging exercises performed with two different ankle positions.</u> The 8th Asia-Pacific Congress on Sports Technology, Tel Aviv, Israel, October 2017.
- **51. Escamilla, R.F.** (invited speaker). <u>Decreasing re-injury rate in anterior cruciate ligament after surgery</u>. VII IBRAMED International Scientific Meeting: New Concepts in Rehabilitation of Orthopaedic Injuries and Sports, Amparo, Brazil, September 2017.
- **52.** Escamilla, R.F. (invited speaker). Shoulder biomechanics and pathology in overhead throwing sports. VII IBRAMED International Scientific Meeting: New Concepts in Rehabilitation of Orthopaedic Injuries and Sports, Amparo, Brazil, September 2017.
- **53. Escamilla, R.F.,** Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., Andrews, J.R. <u>Biomechanical comparison among fastball, slider, curveball, and changeup pitch types in professional baseball pitchers</u>. 2017 California Physical Therapy Association Annual Conference, San Diego, CA, September 2017.
- **54. Escamilla, R.F.,** Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., Andrews, J.R. <u>Patellofemoral force and stress performing the forward lunge with a short and long step at ground level and up to an elevated platform.</u> 2017 California Physical Therapy Association Annual Conference, San Diego, CA, September 2017.

- **55. Escamilla, R.F.** Re-injury rates of post-op ACL reconstructions. Teen Sports Medicine Symposium: Prevention, Injury, Rehab, Performance for the Young athlete, presented at the 2017 Northeast District of the California Physical Therapy Association, Sacramento, CA, July, 2017.
- 56. Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., Andrews, J.R. Peak patellofemoral and ACL/PCL forces while performing the forward lunge exercise with varying techniques. 2017 Annual Meeting, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise and the Brain of the American College of Sports Medicine, Denver, CO, May June, 2017.
- **57.** Escamilla, R.F. Biomechanics and pathomechanics of the throwing shoulder. 2017 American Physical Therapy Association Combined Sections Meetings, San Antonio, TX, February 2017.
- 58. Escamilla, R.F. Comparison of baseball-specific training programs on performance and shoulder injury potential. 2017 American Physical Therapy Association Combined Sections 59. Meetings, San Antonio, TX, February 2017.
- 59. Meetings, San Antonio, 1A, February 2017.
- **60. Escamilla, R.F.** SLAP injuries and the role of the biceps in the overhead throwing athlete. 2017 American Physical Therapy Association Combined Sections Meetings, San Antonio, TX, February 2017.
- **61. Escamilla, R.F.** Shoulder and elbow biomechanics and pathology in pitching. 2017 American Physical Therapy Association Combined Sections Meetings, San Antonio, TX, February 2017.
- **62. Escamilla, R.F.** <u>Biomechanics of the throwing elbow</u>. 35<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Dallas, TX, January 2017.
- **63. Escamilla, R.F.** Comparison of pitching mechanics and control among various pitch types. 35<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Dallas, TX, January 2017.
- **64. Escamilla, R.F.** Elbow Biomechanics and Pathology in the Overhead Throwing Athlete. 4<sup>th</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2017.
- **65. Escamilla, R.F.** Shoulder Biomechanics and Pathology in the Overhead Throwing Athlete. 4<sup>th</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2017.
- **66. Escamilla, R.F.** (invited keynote speaker). <u>Knee joint loading between weight bearing and non-weight bearing rehabilitation exercises.</u> The 11th Beijing International Forum on Rehabilitation, Beijing, China, December 2016.

- **67. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Wang, S., Fleisig, G.S., Wilk, K.E., & Andrews, J.R. <u>Peak patellofemoral and ACL/PCL forces while performing the forward lunge exercise with varying techniques.</u> 2016 Innovative Techniques The Knee Course. Las Vegas, NV, October 2016.
- **68. Escamilla, R.F.** (invited keynote speaker). <u>ACL and patellofemoral loading during weight bearing and non-weight bearing exercise</u>. Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- **69. Escamilla, R.F.** (invited keynote speaker). <u>Examination of the knee.</u> Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- **70. Escamilla, R.F.** (invited keynote speaker). <u>Anterior cruciate ligament rehabilitation</u> following surgery and re-injury prevention strategies. Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- 71. Escamilla, R.F. (invited keynote speaker). <u>Strengthening exercises for the "core" to help prevent lower extremity injuries and improve function.</u> Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- **72. Escamilla, R.F.** (invited keynote speaker). <u>Biomechanics and Pathomechanics of the Shoulder During the Overhead Throwing Motion.</u> Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- 73. Escamilla, R.F. (invited keynote speaker). Rehabilitation Following Arthroscopic Rotator Cuff Repair. Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- 74. Escamilla, R.F. (invited keynote speaker). What are the Best Evidence-Based Exercises for the Shoulder. Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- **75. Escamilla, R.F.** (invited keynote speaker). <u>Comparison of resistance training programs on shoulder strength and power.</u> Evaluation and Treatment of Shoulder and Knee Injuries Course, Salvador, Brazil, August 2016.
- **76.** Escamilla, R.F. Advanced strength & conditioning and nutrition to maximize athletic performance and enhance the rehabilitation process. 2016 American Physical Therapy Association Combined Sections Meetings, Anaheim, CA, February 2016.
- 77. Escamilla, R.F. (invited keynote speaker). Biomechanics and pathology of the overhead throwing shoulder. 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.

- **78. Escamilla, R.F.** (invited keynote speaker). Rehabilitation following arthroscopic rotator cuff repair. 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **79. Escamilla, R.F.** (invited keynote speaker). <u>Biomechanics and pathology of the overhead throwing elbow and the current epidemic of UCL injuries.</u> 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **80. Escamilla, R.F.** (invited keynote speaker). <u>UCL reconstruction long term outcomes and surgical techniques.</u> 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **81. Escamilla, R.F.** (invited keynote speaker). <u>Patellofemoral and ACL loading during weight bearing and non-weight bearing exercise.</u> 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **82. Escamilla, R.F.** (invited keynote speaker). <u>ACL injury prevention, reconstruction, and rehabilitation considerations in the female athlete.</u> 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **83. Escamilla, R.F.** (invited keynote speaker). <u>Anterior cruciate ligament rehabilitation</u> following surgery and re-injury prevention strategies. 2016 Arkansas Physical Therapy Annual Conference, Little Rock, AR, September 2016.
- **84. Escamilla, R.F.** Advanced strength & conditioning and nutrition to maximize athletic performance and enhance the rehabilitation process. 2016 American Physical Therapy Association Combined Sections Meetings, Anaheim, CA, February 2016.
- **85. Escamilla, R.F.** What's new in ACL rehabilitation? evidence based approach for the selection and application of strength and neuromuscular control exercises. 2016 American Physical Therapy Association Combined Sections Meetings, Anaheim, CA, February 2016.
- **86.** Escamilla, R.F. <u>Biomechanics of the throwing shoulder</u>. 34<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Costa Mesa, CA, January 2016.
- **87. Escamilla, R.F.** What are the best evidence-based exercises for the shoulder? 34<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Costa Mesa, CA, January 2016.
- **88.** Escamilla, R.F. Shoulder biomechanics, pathomechanics, and pathology. 2<sup>nd</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2016.
- **89.** Escamilla, R.F. Evidence-based research: rotator cuff & scapular exercises. 2<sup>nd</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2016.

- **90. Escamilla, R.F.** Elbow biomechanics, pathomechanics, and pathology. 2<sup>nd</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2016.
- 91. Escamilla, R.F. (invited keynote speaker). The loading of the ACL between weight bearing and non-weight bearing rehabilitation exercises: Is there a Difference? 2015 10<sup>th</sup> International Congress of Chinese Orthopaedic Association, Chongqing, China, November 2015.
- 92. Escamilla, R.F. Epidemic of UCL injuries in youth & adult pitchers: causes, treatment, & prevention. 2015 62<sup>nd</sup> Annual Meeting of the American College of Sports Medicine, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise Fatigue of the American College of Sports Medicine, San Diego, CA, May 2015.
- **93. Escamilla, R.F.,** Lewis, C., Bell, D., Bramblet, G., Daffron, J., Lambert, S., Pecson, A., Imamura, R., Andrews, J.R.. <u>Muscle activation among supine, prone, and side position exercises with and without a swiss ball.</u> 2015 62<sup>nd</sup> Annual Meeting of the American College of Sports Medicine, World Congress on Exercise is Medicine, and World Congress on the Basic Science of Exercise Fatigue of the American College of Sports Medicine, San Diego, CA, May 2015.
- **94. Escamilla, R.F.** (invited keynote speaker). <u>Loading of the cruciate ligaments and patellofemoral joint during weight bearing and non-weight bearing exercises and activities.</u> CCCATC North Meeting, Sacramento, CA May 2015.
- **95. Escamilla, R.F.** (invited keynote speaker). <u>Loading of the cruciate ligaments during weight bearing and non-weight bearing exercises and activities.</u> 4th International Knee Rehabilitation Course, Campinas, San Paulo, Brazil, April 2015.
- **96. Escamilla, R.F.** (invited keynote speaker). Loading of the patellofemoral joint during weight bearing and non-weight bearing exercises and activities. 4th International Knee Rehabilitation Course, Campinas, San Paulo, Brazil, April 2015.
- **97. Escamilla, R.F.** Pathomechanics and biomechanics of the throwing shoulder. 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.
- **98. Escamilla, R.F.** SLAP injuries and the role of the biceps in the overhead throwing athlete. 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.
- **99. Escamilla, R.F.** Comparison of baseball-specific training programs on performance and shoulder injury potential. 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.

- **100.** Escamilla, R.F. Special considerations for the overhand throwing youth athlete. 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.
- 101. Escamilla, R.F. <u>Biomechanics and pathomechanics of the adolescent thrower.</u> 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.
- 102. Escamilla, R.F. Elbow pitching biomechanics and UCL elbow risk factors in adult and youth pitchers: Biomechanics and risk factors in the throwing elbow. 2015 American Physical Therapy Association Combined Sections Meetings, Indianapolis, IN, February 2015.
- **103. Escamilla, R.F.** <u>Biomechanics of the pitching shoulder</u>. 1<sup>st</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2015.
- **104. Escamilla, R.F.** <u>Biomechanics of the pitching elbow</u>. 1<sup>st</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2015.
- **105.** Escamilla, R.F. Weighted baseballs and long toss biomechanics for healthy pitchers. 1<sup>st</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2015.
- 106. Escamilla, R.F. Which exercise are most effective in recruiting glenohumeral and scapulothoracic muscles. 1<sup>st</sup> Annual San Francisco Giants Sports Medicine Conference. San Francisco, CA, January 2015.
- **107.** Escamilla, R.F. (invited keynote speaker). Strengthening exercises for the core. 2<sup>nd</sup> Annual International Congress of Physiotherapy of the Bahia (II CIFIBA), Porto Seguro, Brazil, November 2014.
- **108.** Escamilla, R.F. (invited keynote speaker). Cruciate ligament loading during weight bearing and non-weight bearing exercises and activities. 2<sup>nd</sup> Annual International Congress of Physiotherapy of the Bahia (II CIFIBA), Porto Seguro, Brazil, November 2014.
- **109.** Escamilla, R.F. (invited keynote speaker). Patellofemoral joint loading during weight bearing and non-weight bearing exercises and activities. 2<sup>nd</sup> Annual International Congress of Physiotherapy of the Bahia (II CIFIBA), Porto Seguro, Brazil, November 2014.
- **110.** Escamilla, R.F. (invited keynote speaker). Rehabilitation after anterior cruciate ligament reconstruction. 2<sup>nd</sup> Annual International Congress of Physiotherapy of the Bahia (II CIFIBA), Porto Seguro, Brazil, November 2014.
- 111. Escamilla, R.F. (invited keynote speaker). Rehabilitation after patellofemoral joint pain syndrome. 2<sup>nd</sup> Annual International Congress of Physiotherapy of the Bahia (II CIFIBA). Porto Seguro, Brazil, November 2014.

- 112. Escamilla, R.F., Wilk, K.E, & Yamashiro, K. The Relationship among Biomechanics, Pitch Counts, and Injury Risk in Youth Baseball. 2014 61st Annual Meeting of the American College of Sports Medicine & 5th World Congress on Exercise is Medicine, and World Congress on the Role of Inflammation in Exercise, Health, and Disease, Orlando, Florida, May 2014.
- 113. Escamilla, R.F., Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. Comparison of three baseball specific six-week training programs on trunk strength and power in high school baseball players. 2014 61<sup>st</sup> Annual Meeting of the American College of Sports Medicine Annual Meeting & 5th World Congress on Exercise is Medicine, and World Congress on the Role of Inflammation in Exercise, Health, and Disease, Orlando, Florida, May 2014.
- **114. Escamilla, R.F.** (invited keynote speaker). <u>Cruciate ligament loading during weight bearing and non-weight bearing exercises and activities.</u> IV Brazilian Conference of Manual Therapy, João Pessoa, Brazil, April-May, 2014.
- 115. Escamilla, R.F. (invited keynote speaker). Patellofemoral joint loading during weight bearing and non-weight bearing exercises and activities. IV Brazilian Conference of Manual Therapy, João Pessoa, Brazil, April-May, 2014.
- 116. Escamilla, R.F., Wilk, K.E, & Yamashiro, K. Minimizing injuries and enhancing performance in youth baseball players. 2014 American Physical Therapy Association Combined Sections Meetings, Las Vegas, NV, February 2014.
- 117. Escamilla, R.F., Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Assessment of baseball training programs on trunk strength and power in high school baseball players.</u> 2014 American Physical Therapy Association Combined Sections Meetings, Las Vegas, NV, February 2014.
- **118. Escamilla, R.F.** <u>Soft tissue and joint influences of poor trunk stability.</u> Northeast Seminars Hip Course, Raleigh, NC, February 2014.
- **119. Escamilla, R.F.** Analysis of trunk exercises in open and closed chain. Northeast Seminars Hip Course, Raleigh, NC, February 2014.
- **120.** Escamilla, R.F. Weighted baseballs and long toss biomechanics. 32<sup>nd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2014.
- **121.** Escamilla, R.F. Six-week core training program for high school baseball players. 32<sup>nd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2014.

- **122.** Escamilla, R.F. (invited keynote speaker). <u>Anterior cruciate ligament: weight bearing and non-weight bearing exercises.</u> IV IBRAMED International Scientific Meeting, Amparo, Brazil, October 2013.
- **123.** Escamilla, R.F. (invited keynote speaker). Patellofemoral loading during rehabilitation exercises and injury prevention strategies for patellofemoral pain. IV IBRAMED International Scientific Meeting, Amparo, Brazil, October 2013.
- **124. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Comparison of three baseball-specific six week training programs on trunk strength and power in high school baseball players.</u> 2013 California Physical Therapy Association Annual Conference, Pasadena, CA, September 2013.
- **125. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Comparison of three baseball-specific six week training programs on shoulder strength and power in high school baseball players.</u> 60<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 2013.
- **126. Escamilla, R.F.** <u>Elbow mechanics during baseball pitching.</u> 2013 Northern California Sports Medicine Education, Sacramento, CA, February 2013.
- **127.** Escamilla, R.F. The effects of baseball training programs on shoulder function. 2013 American Physical Therapy Association Combined Sections Meetings, San Diego, CA, February 2013.
- **128. Escamilla, R.F.,** Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Strength and power development in baseball training programs.</u> 2012 California Physical Therapy Association Annual Conference, Santa Clara, CA, September 2012.
- **129.** Escamilla, R.F. & Andrews, J.R. <u>SLAP injuries and the role of the biceps in the overhead throwing athlete.</u> The American Orthopaedic Society for Sports Medicine (AOSSM) Annual Meeting, Baltimore, MD July 2012.
- **130.** Escamilla, R.F., Carinci, J,M., Barakatt, E., Broyer, P., Butler, C., Ferguson, J., Morgan, A., Morales, R., Rhoads, R. <u>Electromyographic analysis of trunk and hip muscles during swiss ball bridging exercises performed with two different ankle positions.</u> 59<sup>th</sup> Annual Meeting of the American College of Sports Medicine, San Francisco, CA, June 2012.
- **131. Escamilla, R.F.** <u>Treating the overhead athlete.</u> 2012 Kaiser Permanente Northern California Rehabilitation, Sacramento, CA, 2012.
- **132.** Escamilla, R.F. Analysis of trunk exercises for both open and closed chain activities. Clinical Medicine and Sports Science Applications to the Hip and Trunk, Northeast Seminars, Seattle, WA April 2012.

- 133. Escamilla, R.F. Weight room considerations for hip and trunk forces generated in fundamental movements used in training for sport. Clinical Medicine and Sports Science Applications to the Hip and Trunk, Northeast Seminars, Seattle, WA April 2012.
- **134.** Escamilla, R.F. <u>Biomechanics and pathomechanics of the throwing shoulder</u>. 30<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2012.
- **135.** Escamilla, R.F. <u>Biomechanics and pathomechanics of the throwing elbow</u>. 30<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2012.
- **136. Escamilla, R.F.** <u>Shoulder biomechanics during throwing.</u> Southwest Chapter 30<sup>th</sup> Annual Meeting of the American College of Sports Medicine. Reno, NV, Sept 2011.
- **137. Escamilla, R.F.** & Andrews, J.R. <u>Biomechanics of the long biceps brachii in the throwing shoulder.</u> The American Orthopaedic Society for Sports Medicine 2011 Annual Conference. San Diego, CA, July 2011.
- **138.** Escamilla, R.F., Powers, C.M., Souza, R.E. <u>Patellofemoral joint biomechanics during</u> exercises used to strengthen quadriceps and hip musculature. 58<sup>th</sup> annual Meeting of the American College of Sports Medicine, Denver, CO, June 2011.
- **139.** Escamilla, R.F., Ionno, M., deMahy, S., Fleisig, G.S., Wilk, K.E., Yamashiro, K., Mikla, T., Paulos, L. & Andrews, J.R. <u>Comparison of three baseball-specific six-week training programs on throwing velocity in high school baseball players.</u> 58<sup>th</sup> annual Meeting of the American College of Sports Medicine, Denver, CO, June 2011.
- **140.** Escamilla, R.F. Pathomechanics and rehabilitation of the shoulder in the overhead throwing athlete. Florida Physical Therapy Association Annual Conference, Orlando, FL, September 2010.
- **141.** Escamilla, R.F. Current concepts on trunk and lower extremity: Examination, integration, and training. Northeast Seminars, Costa Mesa, CA July 2010; San Francisco, CA September 2010.
- **142. Escamilla, R.F.** <u>Knee Ligament loading for lower extremity exercises.</u> Sports Medicine Symposium of the Americas, Houston, TX June 2010.
- **143. Escamilla, R.F.** <u>Plyometric training transition from rehab to strength and conditioning.</u> Sports Medicine Symposium of the Americas, Houston, TX June 2010.
- **144. Escamilla, R.F.** <u>Principles and adaptations of resistance training.</u> Sports Medicine Symposium of the Americas, Houston, TX June 2010.

- **145. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Dunning, R., Grover, M., Kenniston, M., Loera, J., Tanasse, T., Paulos, L., & Andrews, J.R. <u>An electromyographic analysis of the shoulder while performing exercises using the bodyblade classic and pro.</u> 57<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Baltimore, MD, June 2010.
- **146.** Escamilla, R.F. Cruciate ligament loading for lower extremity exercises. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- 147. Escamilla, R.F. <u>Lifting technique affects knee joint loading and potential injury</u>. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- **148.** Escamilla, R.F. How to protect your patellofemoral joint while strengthening your lower extremity. 2010 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2010.
- **149.** Escamilla, R.F. Comparison of resistance training programs on shoulder strength and power. 28<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2010.
- **150. Escamilla, R.F.** <u>Training programs that increase throwing velocity</u>. 28<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL January 2010.
- **151.** Escamilla, R.F. Principles and adaptations of resistance training. 2009 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Las Vegas, NV Dec 2009.
- **152.** Escamilla, R.F. Cruciate ligament loading during common lower extremity exercises. 2009 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Las Vegas, NV Dec 2009.
- **153. Escamilla, R.F.** <u>Plyometric training.</u> 2009 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Las Vegas, NV Dec 2009.
- **154. Escamilla, R.F.**, Yamashiro, K., Mikla, T., Dunning, R., Grover, M., Kenniston, M., Loera, J., Tanasse, T., Paulos, L., & Andrews, J.R. <u>Upper extremity muscle activity while performing exercises using the bodyblade</u>. 2009 California Physical Therapy Association Annual Conference, Pasadena, CA, October 2009.
- **155. Escamilla, R.F.** Certified strength and conditioning specialist symposium. 2009 California Physical Therapy Association Annual Conference, Pasadena, CA, October 2009.

- **156.** Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Cruciate ligament tensile</u> forces during lunging with varying techniques. 56<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Seattle, WA, May 2009.
- **157.** Escamilla, R.F. <u>Biomechanical and EMG analysis of specific lower extremity exercises</u>. 2009 Injuries in Football Course, Andrews-Paulos Research and Education Institute, Pensacola Beach, FL, April 2009.
- **158. Escamilla, R.F.** <u>Squat and lunge exercises for knee rehabilitation.</u> 27<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Houston, TX, January 2009.
- **159.** Escamilla, R.F., Fleisig, G.S., Yamashiro, K., Mikla, T., Dunning, R., Paulos, L., & Andrews, J.R. Four week training program for adolescent baseball players. 27<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Houston, TX, January 2009.
- **160.** Escamilla, R.F. Biomechanics and EMG in rehabilitation of patellofemoral joint. 2008 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Orlando, FL, Dec 2008.
- 161. Escamilla, R.F. Biomechanical analysis and EMG activity as it relates to ACL and/or PCL. 2008 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Orlando, FL, Dec 2008.
- **162. Escamilla, R.F.** Which exercise are best for glenohumeral and scapulothoracic muscles. 2008 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Orlando, FL, Dec 2008.
- **163.** Escamilla, R.F. Throwing motion: clinical analysis. 2008 Team Concept Conference, Sports Section of the American Physical Therapy Association Annual Meeting, Orlando, FL, Dec 2008.
- **164.** Escamilla, R.F. Essentials of strength and conditioning symposium. 2008 California Physical Therapy Association Annual Conference, Oakland, CA, September 2008.
- **165. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral compressive force and stress during the forward and side lunge with and without a stride.</u> 55<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 2008.
- 166. Escamilla, R.F. Shoulder and elbow biomechanics and pathomechanics of the overhead throwing athlete. 55<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 2008.

- **167. Escamilla, R.F**. <u>Biomechanics of the throwing shoulder.</u> 26<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Columbia, SC, January 2008.
- **168.** Escamilla, R.F. <u>Biomechanics of the throwing elbow.</u> 26<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Columbia, SC, January 2008.
- **169. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral force and stress during the long and short step forward lunge.</u> 2007 California Physical Therapy Association Annual Conference, Los Angeles, CA, September 2007.
- **170. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Cruciate ligament force between the forward lunge and side lunge with and without a stride.</u> 2007 California Physical Therapy Association Annual Conference, Los Angeles, CA, September 2007.
- **171. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Cruciate ligament force during the wall squat and one leg squat</u>. 31<sup>tst</sup> Annual Meeting of the American Society of Biomechanics, Palo Alto, CA, August 2007.
- **172. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Cruciate ligament force between the forward lunge long and short with and without a stride</u>. 31<sup>tst</sup> Annual Meeting of the American Society of Biomechanics, Palo Alto, CA, August 2007.
- **173.** Escamilla, R.F., Lewis, C., Bell, D., Bramblet, G., Daffron, J., Lambert,, S., Pecson, A., Imamura, R., Hreljac A. <u>Training and rehabilitation implications for the trunk and extremities while performing swiss ball and conventional exercises: An electromyographic analysis. 15<sup>th</sup> International World Confederation for Physical Therapy Congress, Vancouver, Canada, June 2007.</u>
- 174. Escamilla, R.F., Lewis, C., Bell, D., Bramblet, G., Daffron, J., Lambert,, S., Pecson, A., Imamura, R., Hreljac A. <u>An electromyographic analysis of plank and swiss ball exercises: training and rehabilitation implications.</u> 54<sup>th</sup> nnual Meeting of the American College of Sports Medicine, New Orleans, LA, May 2007.
- **175. Escamilla, R.F.** Core muscle activity during swiss ball exercises. 25<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2007.
- **176. Escamilla, R.F.** <u>Knee biomechanics during closed chain exercises.</u> 25<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 2007.
- **177. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. Patellofemoral stress and

- muscle activity during common knee rehabilitation exercises. 3<sup>rd</sup> Congress of the International Association of Physical Therapists Working with Older People, Istanbul, Turkey, November 2006.
- **178.** Escamilla, R.F. Strength and aerobic training for the older individual and exercise prescription. 3<sup>rd</sup> Congress of the International Association of Physical Therapists Working with Older People, Istanbul, Turkey, November 2006.
- **179.** Escamilla, R.F. Shoulder problems in older individuals: Evaluation and conservative treatment. 3<sup>rd</sup> Congress of the International Association of Physical Therapists Working with Older People, Istanbul, Turkey, November 2006.
- **180.** Escamilla, R.F., Lewis, C., Bell, D., Bramblet, G., Daffron, J., Lambert,, S., Pecson, A., Imamura, R., Hreljac A. An electromyographic analysis of training and rehabilitation exercises using the swiss ball. 2006 California Physical Therapy Association Annual Conference, San Jose, CA, October 2006.
- **181.** Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral forces and stresses during lunge exercises</u>. 30<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Blacksburg, Virginia, September 2006.
- **182.** Escamilla, R.F., Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>Patellofemoral forces and stresses during squat exercises</u>. 30<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Blacksburg, Virginia, September 2006.
- **183.** Escamilla, R.F. The Biomechanics and pathomechanics of specific overhead sports movements. 2006 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Orlando, FL, June 2006.
- **184.** Escamilla, R.F. Core stability: Integration with lower extremity rehabilitation. 2006 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Orlando, FL, June 2006.
- **185. Escamilla, R.F.**, Zheng, N., MacLeod, T.D., Imamura, R., Edwards, W.B., Hreljac, A., Fleisig, G.S., Wilk, K.E., Moorman, C.T. III, & Andrews, J.R. <u>A biomechanical analysis of squatting and lunging type exercises.</u> 53<sup>rd</sup> Annual Meeting of the American College of Sports Medicine, Denver, CO, June 2006.
- **186. Escamilla, R.F.** Biomechanics, injury mechanisms, and rehabilitation of the knee. Sportsmedicine Symposium, Chicago, IL, March 2006, New York, NY, May 2006.

- **187.** Escamilla, R.F. Open and closed kinetic chain exercises for the lower extremity. 24<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Woodland Hills, CA, January 2006.
- **188.** Escamilla, R.F. Changes in swing mechanics with choking up. 24<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Woodland Hills, CA, January 2006.
- **189.** Escamilla, R.F. Pathomechanics, surgical interventions, rehabilitation and conditioning of the overhand throwing shoulder and elbow. California Research Special Interest Group of the California Physical Therapy Association, Orange, CA, November 2005.
- **190.** Escamilla, R.F. An electromyographic analysis of common lower extremity rehabilitation exercises. 2005 California Physical Therapy Association Annual Conference, Ontario, CA, October 2005.
- **191.** Escamilla, R.F. Biomechanical and electromyographical analysis of lower extremity exercises: implications for ACL and patellofemoral rehabilitation. 2005 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Boston, MA, June 2005.
- 192. Escamilla, R.F. Pathomechanics, rehabilitation, and functional training for the overhand throwing athlete. 2005 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Boston, MA, June 2005.
- **193.** Escamilla, R.F. A biomechanical analysis of traditional and non-traditional abdominal exercises. 52<sup>nd</sup> Annual Meeting of the American College of Sports Medicine, Nashville, TN, June 2005.
- **194.** Escamilla, R.F. Knee forces and muscle activity during common lower extremity exercises: Implications for ACL and patellofemoral rehabilitation. American Physical Therapy Association Combined Sections Meetings, New Orleans, LA, February 2005.
- **195. Escamilla, R.F.** Pathomechanics of the throwing shoulder. 2005 Shoulder Update: Surgical Techniques, Treatment Progression and Return to Activity, Sutter Health Sacramento Sierra Region, Rehabilitation Services Continuing Education, May 2005.
- 196. Escamilla, R.F. Training and conditioning modifications for the bad back and the bad knee. 23<sup>rd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Scottsdale, AZ, January 2005.
- **197. Escamilla, R.F.** Changes in pitching mechanics due to fatigue. 23<sup>rd</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Scottsdale, AZ, January 2005.

- **198.** Escamilla, R.F., Babb, E., DeWitt, R., Jew, P., Kelleher, P., Burnham, T., Busch, J., D'Anna, K., and Mowbray, R. An electromyographical analysis of traditional and non-traditional abdominal exercises. 2004 California Physical Therapy Association Annual Conference, Anaheim, CA, October 2004.
- 199. Escamilla, R.F., Barrentine, S.W., Fleisig, G.S. Zheng, N., Takada, Y., Kingsley, D., & Andrews, J.R. Pitching biomechanics as a pitcher approaches fatigue during a simulated baseball game. 5<sup>th</sup> International Conference on Engineering of Sport, Davis, CA, September, 2004.
- **200.** Escamilla, R.F. A biomechanical analysis of abdominal exercises. 2004 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Chicago, IL, July 2004.
- **201.** Escamilla, R.F. <u>Biomechanics and pathomechanics of the throwing shoulder and elbow in relationship to injury prevention and performance enhancement.</u> 2004 Annual Conference and Scientific Exposition of the American Physical Therapy Association, Chicago, IL, July 2004.
- **202.** Escamilla, R.F. Biomechanics and pathomechanics of the throwing shoulder and elbow: insight into the injury mechanism. 51<sup>st</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 2004.
- **203. Escamilla, R.F.**, McCaw S.T., Salem, G.J. <u>Biomechanics of lower extremity functional exercise: rehabilitation and neuromuscular considerations.</u> 51<sup>st</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 2004.
- **204.** Escamilla, R.F. Pathomechanics, surgical interventions, and progressive rehabilitation of the overhand throwing athlete. Northeast District of the California Physical Therapy Association, Sacramento, CA, May 2004.
- **205. Escamilla, R.F.** <u>Biomechanics of the throwing shoulder.</u> 2003 California Physical Therapy Association Annual Conference, Sacramento, CA, October 2003.
- **206.** Escamilla, R.F. An electromyographic analysis of commercial and common abdominal exercises. 2003 California Physical Therapy Association Annual Conference, Sacramento, CA, October 2003.
- 207. Escamilla, R.F. Biomechanical analysis of sumo and conventional deadlifts in females during the special olympics world games. 50<sup>th</sup> Annual Meeting of the American College of Sports Medicine, San Francisco, CA, May 2003.
- **208. Escamilla, R.F.** Exercises for the trunk and lower extremity. 21st Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2003.

- **209. Escamilla, R.F.** <u>International pitching biomechanics</u>. 21st Annual Injuries in Baseball Course, American Sports Medicine Institute, Atlanta, GA, January 2003.
- **210.** Escamilla, R.F. Rehabilitation exercises for stabilization and mobilization of the cervical spine. Spencer Foundation Spinal Cord Injury Research Conference, Durham, NC, June 2002.
- **211.** Escamilla, R.F. Biomechanical analysis of the deadlift during the 1999 special olympics world games. XIX International Symposium on Biomechanics in Sports, San Francisco, CA, June 2001.
- **212. Escamilla, R.F.** <u>Knee biomechanics.</u> XIX International Symposium on Biomechanics in Sports, San Francisco, CA, June 2001.
- **213. Escamilla, R.F.** <u>Knee biomechanics during rehabilitation exercises.</u> 48<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Baltimore, MD, June, 2001.
- **214.** Escamilla, R.F. Weight training modifications to decrease injuries and protect the surgery. 19th Annual Injuries in Baseball Course, American Sports Medicine Institute, Phoenix, AZ, January 2001.
- **215. Escamilla, R.F.** Do break away bases prevent ankle injuries? 19th Annual Injuries in Baseball Course, American Sports Medicine Institute, Phoenix, AZ, January 2001.
- **216.** Escamilla, R.F., Fleisig, G.S., Barrentine, S.W., Andrews, J.R., & Moorman, C.T., III. Kinetic comparisons between American and Korean professional pitchers. 24<sup>th</sup> Annual Meeting of the American Society of Biomechanics, Chicago, IL, July, 2000.
- **217. Escamilla, R.F.** <u>Training for maximizing strength and power in sport.</u> 2nd Annual Sports Performance Enhancement Workshop, Durham, NC, July 2000.
- **218.** Escamilla, R.F. A three-dimensional biomechanical analysis of the squat with varying stance widths. 47<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, June, 2000.
- **219.** Escamilla, R.F. Aerobic and anaerobic exercise in the older patient. 47<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, June, 2000.
- **220.** Escamilla, R.F. Insight into injury: the K-Lab. 2000 Annual Meeting of the Radiology and Orthopaedics of Sports Medicine, Raleigh, NC, May, 2000.
- **221.** Escamilla, R.F. <u>Biomechanics and kinematics of the knee.</u> Sports Expo 2000 Annual Meeting of the Moore Orthopaedic Clinic, Columbia, SC, April 2000.
- **222. Escamilla, R.F.** <u>Current biomechanical data on knee bracing.</u> Sports Expo 2000 Annual Meeting of the Moore Orthopaedic Clinic, Columbia, SC, April 2000.

- **223. Escamilla, R.F.** Exercises for the lower extremity and trunk. 18th Annual Injuries in Baseball Course, American Sports Medicine Institute, Tampa, FL, January 2000.
- **224.** Escamilla, R.F., Francisco, A.C., Kayes, A.V., Speer, K.P., & Moorman, C.T., III. <u>A</u> three-dimensional kinetic analysis of sumo and conventional style deadlifts. 23<sup>rd</sup> Annual Meeting of the American Society of Biomechanics, Pittsburgh, PA, October 1999.
- **225.** Escamilla, R.F., Fleisig, G.S., Zheng, N., Barrentine, S.W., & Andrews, J.R. <u>Kinematic comparisons of 1996 olympic baseball pitchers</u>. XVIIth Annual Meeting of the International Society of Biomechanics Congress, Calgary, Alberta, Canada, August 1999.
- **226. Escamilla, R.F.** <u>Strength and power training</u>. 1<sup>st</sup> Annual Sports Performance Enhancement Workshop, Durham, NC, July 1999.
- **227. Escamilla, R.F.**, Francisco, A.C., Kayes, A.V., Speer, K.P., & Moorman, C.T., III. <u>A</u>

  <u>Biomechanical analysis of sumo and conventional style deadlifts</u>. 1999 Annual Meeting of the National Strength and Conditioning Association, Kansas City, KA, June 1999.
- **228.** Escamilla, R.F., Fleisig, G.S., Barrentine, S.W., Andrews, J.R., & Speer, K.P. Kinematic comparisons between American and Korean professional baseball pitchers. 46<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Seattle, WA, June 1999.
- **229. Escamilla, R.F.** The impact of fatigue on coordinated shoulder muscle function. 46<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Seattle, WA, June 1999.
- **230.** Escamilla, R.F., Fleisig, G.S., Zheng, N., Barrentine, S.W., Wilk, K.E., & Andrews, J.R. Biomechanics of the knee during closed kinetic chain and open kinetic chain exercises. 45<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Orlando, FL, June 1998.
- **231.** Escamilla, R.F. Relationship between select kinematic parameters and ball velocity during baseball pitching. XXVI FIMS World Congress of Sports Medicine, Orlando, FL, June 1998.
- **232.** Escamilla, R.F. <u>Biomechanics of sport.</u> Chairperson for free communication slide session at the 45<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Orlando, FL, June 1998.
- **233.** Escamilla, R.F. Biomechanics and pathomechanics during baseball pitching. 16th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1998.
- **234.** Escamilla, R.F. Youth weight training for baseball. 16th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1998.
- 235. Escamilla, R.F., Zheng, N., Fleisig, G.S., Lander, J.E., Barrentine, S.W., Cutter, G.R., & Andrews, J.R. The effects of technique variations on knee biomechanics during the squat and leg press. 44<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Denver, CO, June 1997.

- **236.** Escamilla, R.F. The biomechanics of exercise. California Association of Health, Physical Education, Recreation, and Dance State Convention, Los Angeles, CA, March 8, 1997.
- **237.** Escamilla, R.F. Scientific assessment of olympic baseball. 15th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1997.
- **238. Escamilla, R.F.** <u>Shoulder pathomechanics</u>. 15th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1997.
- **239.** Escamilla, R.F. Problems in weight training for baseball. 15th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1997.
- **240.** Escamilla, R.F. Weight training for injury prevention in youth. 15th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1997.
- **241.** Escamilla, R.F. Weight training /body building for females. Sports Medicine and Soccer Symposium, Birmingham, AL, July 27, 1996.
- **242. Escamilla, R.F.** <u>Weight training for soccer</u>. Sports Medicine and Soccer Symposium, Birmingham, AL July 26, 1996.
- **243.** Escamilla, R.F. <u>Biomechanics of knee rehabilitation exercises</u>. American Sports Medicine Institute's Sports Medicine Conference, Birmingham, AL, July 8, 1996.
- **244.** Escamilla, R.F. <u>Biomechanics of the throwing shoulder</u>. 63rd annual meeting of The American Academy of Orthopaedic Surgeons, 1996.
- **245. Escamilla, R.F.** Shoulder pathomechanics in throwing. 14th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1996.
- **246.** Escamilla, R.F. Biomechanical analysis of the shoulder during weight training exercises. Recent Advances in the Evaluation and Treatment of the Knee and Shoulder Course, HealthSouth Sports Medicine and Rehabilitation Center, Birmingham, AL, November, 1995.
- **247. Escamilla, R.F.**, Zheng, N., Fleisig, G.S., Lander, J.E., Barrentine, S.W., Cutter, G.R., & Andrews, J.R. The effects of technique variations on knee forces and muscle activity during the squat and leg press. Third IOC World Congress on Sports Sciences, Atlanta GA, September 1995.
- **248.** Escamilla, R.F. Special weight training for football and basketball. 4<sup>th</sup> Annual Injuries in Football and Basketball Course, American Sports Medicine Institute, Birmingham, AL, May 1995.
- **249.** Escamilla, R.F. Knee forces and muscle activity during the squat and leg press. SEATA Athletic Trainer Clinical Symposium, Atlanta GA, March 1995.

- **250.** Escamilla, R.F. Mechanical factors related to increased pitch velocity. 13th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1995.
- **251. Escamilla, R.F.** <u>Biomechanics of the throwing shoulder</u>. 13th Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1995.
- **252.** Escamilla, R.F. <u>Current concepts in anterior cruciate ligament rehabilitation</u>. American Orthopaedic Society for Sports Medicine Symposium (Knee Arthroscopy and Knee Instabilities), Birmingham, AL, October 1994.
- **253. Escamilla, R.F.** A biomechanical comparison while throwing different types of baseball pitches. Canadian Society for Biomechanics, Calgary, Alberta, August, 1994.
- **254.** Escamilla, R.F., Fleisig, G.S., Alexander, J.R., & Andrews, J.R. <u>A kinematic and kinetic comparison while throwing different types of baseball pitches</u>. 41<sup>st</sup> Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, June 1994.
- **255.** Escamilla, R.F. Principles of strength training in football and running. 3<sup>rd</sup> Annual Injuries in Football and Wrestling Course, American Sports Medicine Institute, Birmingham, AL, May 1994.
- **256.** Escamilla, R.F. Biomechanics of the elbow joint during pitching. SEATA Athletic Trainer Clinical Symposium, Atlanta GA, March 1994.
- 257. Escamilla, R.F. Motion and stress analysis research of the Spine. Alabama Spine Institute & HealthSouth Medical Center Spine Symposium, HealthSouth Medical Center, Birmingham, AL, March, 1994.
- **258.** Escamilla, R.F., Fleisig, G.S., Alexander, J.R., & Andrews, J.R. <u>Biomechanics of various pitches</u>. 12<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1994.
- **259.** Escamilla, R.F. The baseball player in the 90's: Current concepts in conditioning and training. 12<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1994.
- **260.** Escamilla, R.F. Problems in weight training for baseball. 12<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1994.
- **261. Escamilla, R.F.** <u>Advances in orthopaedics: biomechanics</u>. 3<sup>rd</sup> Annual Orthopaedic Update, HealthSouth Medical Center, Birmingham, AL, August 1993.
- **262. Escamilla, R.F.** Strength training for the upper body. 61st Annual University of Alabama Coaching Clinic, Tuscaloosa, AL, July 1993.
- **263. Escamilla, R.F.** <u>Functional biomechanics of sporting activities</u>. HealthSouth Shoulder Specialization Course, Birmingham, AL, June 1993.

- 264. Escamilla, R.F., Fleisig, G.S., & Andrews, J.R. <u>A kinematic and kinetic comparison</u> between baseball pitching and football passing. 40<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Seattle, WA, June 1993.
- **265.** Escamilla, R.F., Fleisig, G.S., & Andrews, J.R. The biomechanical difference between throwing a baseball and throwing a football. 2<sup>nd</sup> Annual Injuries in Football and Wrestling Course, American Sports Medicine Institute, Birmingham, AL, May 1993.
- **266.** Escamilla, R.F. Periodization and weight training techniques for football and wrestling. 2<sup>nd</sup> Annual Injuries in Football and Wrestling Course, American Sports Medicine Institute, Birmingham, AL, May 1993.
- **267. Escamilla, R.F.** <u>Biomechanics: weight training</u>. SEATA Student Athletic Trainer Clinical Symposium, University of Alabama, Tuscaloosa, AL, February 1993.
- **268.** Escamilla, R.F., Fleisig, G.S., & Andrews, J.R. Comparison of baseball and football throwing. 11<sup>th</sup> Annual Injuries in Baseball Course, American Sports Medicine Institute, Birmingham, AL, January 1993.
- **269.** Escamilla, R.F. Biomechanical analysis, pathophysiology, and clinical exam in the throwing shoulder. American Sports Medicine Institute's Sports Medicine Conference, Birmingham, AL, September 1992.
- **270. Escamilla, R.F.** <u>Health and fitness essentials</u>. Birmingham Football Officials Association. Birmingham, AL, September, 1992.
- **271. Escamilla, R.F.** <u>Injuries in powerlifting</u> American Sports Medicine Institute's Sports Medicine Conference, Birmingham, AL, June 1992.
- **272.** Escamilla, R.F. Proper techniques, periodization, and biomechanical differences between weight training for football vs. powerlifting. 1<sup>st</sup> Annual Injuries in Football Course, American Sports Medicine Institute, Birmingham, AL, May 1992.
- **273. Escamilla, R.F.** <u>Power training for the lower extremity</u>. 60th Annual University of Alabama Coaching Clinic, Tuscaloosa, AL, July 1992.
- **274.** Escamilla, R.F. & Sawhill, J. <u>Cinematographical examination of powerlifting aids in squatting</u>. 6th International Symposium on Biomechanics in Sports, Bozeman, MT, July 1988.

#### **JOURNAL REVIEWER**

1997-present Medicine and Science in Sports and Exercise

1997-present The Journal of Orthopaedic & Sports Physical Therapy

1998-present The Journal of Applied Biomechanics

2000-present Journal of Athletic Training

2002-present Journal of Biomechanics

2002-present Sports Biomechanics

2006-present Journal of Strength and Conditioning Research

2016 – present SportsHealth

2008-2009 Journal of Sport Rehabilitation

2002-2009 Physical Therapy in Sport

2006-2008 Sports Engineering

2004-2007 Journal of Sports Sciences

2001-2005 European Journal of Applied Physiology

#### SELECT SAMPLE OF CONTINUING EDUCATION

2014-2021	Annual Meeting of the American College of Sports Medicine
2014-2021	Annual American Sports Medicine Institute Injuries in Baseball Course
2014-2021	Annual APTA Combined Sections Meeting
2011, 2012, 2021	The American Orthopaedic Society for Sports Medicine Annual Meeting
2010, 2012, 2014	Northeast Seminars
2014	National Strength and Conditioning Association Annual Conference
2009, 2010, 2013	California Physical Therapy Association Annual Conference
2009	Sports Medicine Symposium of the Americas
2009	Annual APREI Injuries in Football Course
2009	Team Concept Annual Meeting, Sports Section of the APTA

#### SELECT SAMPLE OF UNIVERSITY/COLLEGE/DEPARTMENT SERVICE

## University Level Committees at California State University, Sacramento

- Campus Wellness University Committee (Represents CHHS) (2015 Present)
  - With DPT Students Assessed Body Composition and Cardiorespiratory Fitness at the STRONG 2016 Campus Wellness Event (April 2016)
- Research and Creative Activity Award Application Reviewer (2009-2010)
- CSUS Faculty Senate 2005-2008 (alternate 2003)

#### College Level Committees California State University, Sacramento

- Head Marshall for Health and Human Services Commencement (2022)
- College of Health & Human Services Secondary Retention Tenure & Promotion (RTP) Committee, member (2011-2014)
- Center for Health Profession, Policy and Practice (CHPPP) (2017-2018)
- College of Health & Human Services Primary Retention, Promotion and Tenure Committee Chair and Member (2002-2015)
- College of Health & Human Services Safety Committee (2010-2012)
- Commencement Marshall (2009-2014)
- Student Appeals Committee (2008-2009)

# Department Level Committees California State University, Sacramento

- Department of Physical Therapy:
  - o Primary RTP Committee, Chair (2011 Current)
  - o Core Faculty Review Committee Chair and Member (2014 Current)
  - o Faculty Search Committee Alternate, Clinical Education (2015-2016)
  - Faculty Search Committee Chair, Clinical Education (2012) and Biomechanics (2013)
  - o Research Committee member (2005-Current)
  - o Student Affairs Committee, Chair (2007-Current)
  - o Program Council Committee Member (2002-Current)
  - o Community Advisory Board (2002-present)
- Department of Nursing:
  - o Primary RTP Committee (2010-2011)

## **Other University Service**

2014-2015	Mentor Program Participant for New Faculty. Department of Physical Therapy, College of Health and Human Services, California State University, Sacramento.
1998-2002	Third Year Research Mentor in Biomedical Engineering Program for Duke University Medical Students, Duke University Medical Center, Durham, NC
1998-2002	Clinical Research Committee Member and Advisor for Duke University Physical Therapy Students, Duke University Medical Center, Durham, NC
1998-2002	Thesis and Senior Project Committee Member in Biomedical Engineering, Duke University, Durham, NC
1998-2002	Student Internship Program, Duke University, Durham, NC

1996-98 <u>University Academic Senate</u>, California Polytechnic State University, San

Luis Obispo, CA

# SELECT SAMPLE OF COMMUNITY SERVICE

2016-Current	California Physical Therapy Association (CPTA) Research Council Member
2016-Current	California Physical Therapy Association (CPTA) Annual Conference Task Force Member
2016	Mentor and Team Leader for the 2016 California Physical Therapy Association (CPTA) Student Legislative Day, Sacramento, CA, February 2016.
2014-Current	Physical Therapy Group Information Session for Potential students
2015	Presented a <u>Certified strength and conditioning specialist</u> " workshop, sponsored by the California Physical Therapy Association (CPTA), Sacramento, CA, November 2015.
2014-2015	In spring 2014 I co-developed with Kyle Yamashiro and Dr Ken Akizuki the San Francisco Giants First Annual Sports Medicine Conference, which was held in San Francisco in January 2015 and had over 300 physical therapist and other health professionals. Subsequently, I was the Program coordinator for the San Francisco Giants Second Annual Sports Medicine Conference, January 2016.
2014-2015	Health Fair – I wrote a computer program to assess BMI, cardiorespiratory fitness, and body fat at the Sacramento Health Fair, Sacramento, CA
2013	Abstract reviewer for the California Physical Therapy Association
2012-2013	Presented "Current Concepts in Knee Rehabilitation" and "Treating the Overhead Athlete: <u>Biomechanics, Pathology, and Rehabilitation of the Shoulder and Elbow</u> " to the greater Sacramento physical therapy community as part of an educational grant co-sponsored by Kaiser Permanente and California State University, Sacramento to provide free physical therapist education for the community.
2012-2013	I co-developed with Kyle Yamashiro a Long Term Sports Medicine Course, presented by the Northern California Sports Medicine Education. Course met 3 hours per month from January to May annually at Results Physical Therapy and Training Center, Sacramento, CA.

2011	Presented a <u>Certified strength and conditioning specialist</u> " workshop, sponsored by Kaiser Permanente, Sacramento, CA, May 2011.
2009	Presented a <u>Certified strength and conditioning specialist symposium</u> at the 2009 California Physical Therapy Association Annual Conference, Pasadena, CA, October 2009
2005-2009	Associate Editor for North American for the peer review journal "Physical Therapy in Sport".
2005	Presentation entitled "Pathomechanics of the Throwing Shoulder" - 2005 Shoulder Update: Surgical Techniques, Treatment Progression and Return to Activity, Sutter Health Sacramento Sierra Region, Rehabilitation Services Continuing Education, May 2005.
2005	Presentation entitled "Pitching mechanics, injury risks, and pitch types in youth baseball" – presented at Kaiser Little League Coaches Clinic, Sacramento, CA
2005	Presentation entitled "Knee forces and muscle activity during common lower extremity exercises: Implications for ACL and patellofemoral rehabilitation" – presented at UC Davis Sports Medicine Conference, Sacramento, CA
2004	Presentation entitled "Biomechanics of the throwing shoulder and elbow" – presented at UC Davis Sports Medicine Conference, Sacramento, CA
2003-2004	Item Writer - Federation of State Boards of Physical Therapy (FSBPT)
2004	Chairperson, Biomechanics, 5 <sup>th</sup> International Conference on Engineering of Sport, Davis, CA
2003	Presentation entitled "Aerobic and anaerobic exercise for the elderly" – sponsored by the CSUS Life Center, Sacramento, CA
2002	Chairperson, Lifting and bending biomechanics. 49 <sup>th</sup> Annual Meeting of the American College of Sports Medicine, St. Louis, MI
2001	Presentation entitled "Fitness testing and exercise prescription for high school students" - presented to the Durham Academy Summer Sports Camp", Durham, NC

2000	Presentation entitled "Aerobic and anaerobic exercise testing and prescription in the older patient" – presented to physical therapists in the community, Duke University, Durham, NC
2000	Presentation entitled "A career in sports medicine" – presented to the North Carolina School of Science and Math", Durham, NC
1999	Presentation entitled "Strength and power training" - 1 <sup>st</sup> Annual Sports Performance Enhancement Workshop, Durham, NC
1998	Presentation entitled "Health and fitness for life" – Teer House, Duke University, Durham, NC

# **REFERENCES**

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