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EDUCATION

University of Virginia **May 1999**
Doctor of Philosophy: Sports Medicine
Dissertation Title: Neuromuscular Response Characteristics in Males and Females Following Knee Perturbation

University of Arizona **July 1985**
Master of Science: Exercise and Sport Sciences

California State University, Fullerton **January 1984**
Bachelor of Science: Physical Education; Athletic Training Emphasis

CERTIFICATIONS & LICENSURE

Certified Athletic Trainer **1984 - Present**
National Athletic Trainers' Association - Certification # 08-462 *February 27, 1984*
Commonwealth of Virginia, Board of Medicine - Certification # 0126000035 *October 2001-03*
North Carolina Board of Athletic Trainer Examiners – License #0914 *October 03 - Present*

Certified Strength and Conditioning Specialist **1989 - Present**
National Strength and Conditioning Association - Certification # 89329 *June 1989*

PROFESSIONAL POSITIONS

University of North Carolina at Greensboro **August 2002 - Present**
Assistant Professor
Director, Graduate Programs in Sports Medicine
Co-Director, Applied Neuromechanics Research Laboratory
Tenure track faculty appointment participating in research endeavors and academic programs, in the Sports Medicine and Athletic Training specializations, in the department of Exercise and Sport Sciences. Responsibilities include: Program Direction of the Entry-Level Graduate Athletic Training Education Program (2002-04) and the Doctoral Program in Sports Medicine; classroom instruction at the graduate level in qualified areas; advising and mentoring of graduate students on research projects and program of study by chairing and serving on master's theses, doctoral program and dissertation committees; assist in direction and supervision of the Applied Neuromechanics Research Laboratory; and pursuing external funding and collaboration with other faculty members to support both individual and laboratory research agendas.

University of North Carolina at Chapel Hill **September 2003 – Present**
Adjunct Assistant Professor *July 2002 - Present*
Participating on masters thesis committees in the Sports Medicine and Athletic Training specialization.

University of Virginia

June 1998 – 2003

Adjunct Assistant Professor

July 2002 – August 2003

Adjunct faculty appointment to complete ongoing academic advising and research endeavors in the Sports Medicine and Athletic Training Specialization.

Assistant Professor

June 2000 – July 2002

Interim Coordinator, Graduate Programs in Athletic Training and Sports Medicine

July 2001 – July 2002

Director, Strength and Balance Laboratory, General Clinical Research Center

September 2001 – July 2002

Faculty appointment participating in research endeavors and academic programs in the Sports Medicine and Athletic Training Specialization. Responsibilities included: coordinator of NATA Accredited Graduate Program in Athletic Training (2001-02); classroom instruction at both graduate and undergraduate levels in qualified areas; advising and mentoring graduate students on research projects and program of study by chairing and serving on master's theses, doctoral program and dissertation committees; direction and supervision of the Sports Medicine and Athletic Training Research Laboratory; and pursuing external funding and collaboration with other faculty members to support both individual and sports medicine laboratory research agendas.

Research Associate

June 1999 - June 2000

Responsibilities included teaching graduate and undergraduate courses in the Sports Medicine and Athletic Training program areas, serving on doctoral dissertation and master's thesis committees, grant writing, daily operation and maintenance of the Sports Medicine / Athletic Training Research Laboratory, and assisting with on going research projects.

Graduate Research Assistant

June 1998 - May 1999

Responsible for daily operation and maintenance of the Sports Medicine / Athletic Training Research Laboratory. Assist faculty members, doctoral and master's students with on going research projects.

Blue Ridge School, Virginia

August 1996 - June 1998

Head Athletic Trainer

Responsible for care, prevention, treatment and rehabilitation of athletic injuries for all athletic teams. Consulting with coaches on sport specific conditioning programs. Responsible for budget and ordering.

University of California, Los Angeles

September 1991 - September 1996

Associate Director of Athletic Training and Rehabilitative Services

Head Athletic Trainer: Women's Intercollegiate Athletics

Responsible for coordinating medical care for NCAA Division I women's intercollegiate athletic teams including pre-season screening, prevention, treatment and rehabilitation. Primary Coverage of Women's Basketball, Volleyball, Softball and M & W Cross Country. Assisted with Football. Director UCLA Student Athletic Training Internship Program. Other administrative responsibilities included staff scheduling, budget and ordering, coordination of NCAA regional and national tournaments and championship events.

TRACC Sports Medicine, Inc.

July 1985 - September 1991

Assistant Director

A combined physical therapy and conditioning center. Experienced in working with physical therapy patients, general population, recreational athletes, junior national athletes, elite and professional athletes. Responsible for consultation and development of rehabilitation, conditioning and sport specific training programs for clients of all ages. Provided treatment to aid in injury rehabilitation to physical therapy clients. Provided athletic training services and coverage for sponsored and contracted athletic events. Administrative responsibilities included direction and scheduling of staff, specialty programs administration, facility promotions, equipment ordering and maintenance, development of staff policies and procedures.

SCHOLARSHIP**Grants Awarded**

- National Federation of State High School Athletics Associations** **2004-2005**
 “Health and Safety Issues in High School Athletics”
Project Coordinator, University of North Carolina at Greensboro
 Phase III continuation of previously funded project to develop the 3rd edition of the National Federation of State High School Association's Sports Medicine Handbook. \$9,994.00 Direct Costs
- Warner / Fermaturo and KCOM Board of Trustees** **2003-2005**
 “Gender Differences in Neuromuscular Response Characteristics Between Prepubescent Boys and Girls Following a Knee Perturbation”. SJ Shultz; Consultant
 Principal Investigator: Tamara C. Valovich, Arizona School of Health Sciences. \$3,985 Direct Costs.
- Faculty Grant** **2003-2005**
 “Kinematic Analysis of Functional Knee Stability Following a Lower Extremity Perturbation”
S.J. Shultz; Co-Principal Investigator with RJ Schmitz, University of North Carolina at Greensboro. \$11,550
- New Faculty Grant** **2002- 2003**
 “Effect of Knee Joint Displacement and Load on Neuromuscular Reflex Behavior: A Reliability and Validity Study”
Principal Investigator, University of North Carolina at Greensboro. \$5,000
- National Institutes of Health - General Clinical Research Center Grant # MO1 RR 00847-28** **2001 - 2002**
 The major goal of this project is to make available to medical scientists the resources that are necessary for the conduct of clinical research.
S.J. Shultz; Director, Strength & Balance Laboratory (15% Effort), University of Virginia
 (Principal Investigator: Robert M. Carey). \$3,850,701 (Direct)
- NIH – National Institute of Arthritis and Musculoskeletal and Skin Diseases (RO3)** **2000 - 2004**
 “Gender, Sex Specific Hormones and Anterior Cruciate Ligament Compliance”
S.J. Shultz; Co-Principal Investigator and Project Coordinator (25% Effort)
 University of Virginia (Years 1&2), University of North Carolina at Greensboro (Year 3; no cost extension Year 4)
 (Principal Investigator; David H. Perrin). \$150,000 (Direct)
- National Federation of State High School Associations** **2000 - 2002**
 Phase II continuation of previously funded project to develop a National Federation of State High School Association's Sports Medicine Handbook.
S.J. Shultz; Principal Investigator (5% Effort), University of Virginia. \$12,548.39
- Summer Grant Writing Award** **Summer 2001**
 Internal award to prepare a research grant proposal to investigate the effects of knee joint displacement and load on neuromuscular reflex behavior (Incorporated into R01 Proposal).
S.J. Shultz; Principal Investigator, University of Virginia. \$5,000.00
- Summer Grant Writing Award** **Summer 2000**
 Internal award to prepare a research grant proposal to compare neuromuscular response strategies, kinematics and ground contact forces in males and females during functional perturbations and landing maneuvers. (Incorporated into R01 Proposal)
S.J. Shultz; Principal Investigator, University of Virginia. \$5,000.00
- National Athletic Trainers’ Association Research and Education Foundation** **2000 – 2003**
 “Effect of Lower Extremity Limb Alignment on Neuromuscular Activation Patterns”
S.J. Shultz; Co-Principal Investigator with David H. Perrin; University of Virginia. \$35, 207.00
- National Federation of State High School Associations** **1999 – 2000**
 Collection and Analysis of Information on Current Sports Medicine Issues for Development of a National Association Sports Medicine Handbook.
S.J. Shultz; Principal Investigator, University of Virginia. \$12,940.00

National Athletic Trainers' Association Research and Education Foundation **1997 - 1999**
 "Neuromuscular Response Characteristics in Males and Females Following Knee Perturbation."
S.J. Shultz; Co-Principal Investigator with David H. Perrin PhD, ATC; University of Virginia. \$18,811.00

Far West Athletic Trainers' Association **1997 - 1998**
 "Reliability and Validity of a Functional Perturbation Device to Assess Neuromuscular Response Characteristics." S.J. Shultz; Principal Investigator, University of Virginia. \$750.00

Grants Submitted / Pending

NIH – National Institute of Arthritis and Musculoskeletal and Skin Diseases (RO1) **Submitted February, 2005**
 "Hormone-Mediated Knee Joint Laxity and Neuromechanics"
Principal Investigator, University of North Carolina at Greensboro

NIH – National Institute of Arthritis and Musculoskeletal and Skin Diseases (RO1) **Submitted March, 2004**
 "Sex, Hormone-Mediated Knee Laxity and Knee Stability"
Co-Principal Investigator, University of North Carolina at Greensboro (Principal Investigator; David H. Perrin, PhD)

NIH – National Institute of Arthritis and Musculoskeletal and Skin Diseases (RO1) **Submitted March, 2004**
 "A Case-Control Study of ACL Injury Risk Factors"
Co-Principal Investigator, University of North Carolina at Greensboro (Principal Investigator; Bruce Beynon, PhD)

NIH – National Institute of Arthritis and Musculoskeletal and Skin Diseases (RO1) **Submitted October, 1999**
 "Gender and Hormonal Factors Relating to Active Muscle Stiffness"
Co-Investigator, University of Virginia (Principal Investigator; Kevin P. Granata, PhD): Not Funded

The Aircast Foundation, Inc. **Submitted April, 1999**
 "Estradiol and progesterone levels and knee joint stiffness". Co-Investigator, University of Virginia
 (Principal Investigator; David H. Perrin): Not Funded.

Patents

Reflex Testing Apparatus **Submitted January, 2004**
 A Reflex Testing Apparatus (RTA) designed to initiate a patellar tendon reflex while anterior directed loads displace the tibia relative to the femur (University of North Carolina at Greensboro; Greensboro, NC - patent pending). The diagnostic capabilities of this device in quantifying neuromuscular functional deficits and recovery is currently being explored.
Principal Inventor.

Refereed Journal Publications

Shultz SJ, Shimokochi Y, Nguyen A, Ambegaonkar JP, Schmitz RJ, Beynon BD, Perrin DH. Non-Weight Bearing Anterior Knee Laxity is Related to Anterior Tibial Translation During Transition from Non-Weight Bearing to Weight Bearing. *Journal of Orthopaedic Research (In Review)*

Shultz SJ, Nguyen A, Windley TC, Kulas AS, Botic TL, Beynon BD. Intratester and Intertester Reliability of Clinical Measures of Lower Extremity Anatomical Alignment; Implications for Multi-center Studies. *Clinical Biomechanics (In Review)*

Shultz SJ, Gansneder BM, Sander TC, Kirk SE, Perrin DH. Absolute Hormone Levels Predict the Magnitude of Change in Knee Laxity Across the Menstrual Cycle. *Journal of Orthopaedic Research (In Review)*

Schmitz RJ, Kulas AS, Perrin DH, Riemann BL, Shultz SJ. Sex Differences in Lower Extremity Biomechanics during Single Leg Landings. *American Journal of Sports Medicine (In Review)*

Carcia CR, Eggen JM, Shultz SJ. Hip Abductor Fatigue Affects Frontal Plane Landing Angle, But Not Excursion During a Drop Jump. *Journal of Sport Rehabilitation (In Review)*

Sander TC, Shultz SJ, Gansneder BM, Bunker LK, Perrin DH. Conscious Muscular Contraction Increases Pre- and Post-perturbation Neuromuscular Activation. *Journal of Electromyography and Kinesiology (In Review)*

- Carcia CR, Shultz SJ, Granata KP, Perrin DH, Martin RL. Females recruit quadriceps faster than males at multiple knee flexion angles following a weight-bearing rotary perturbation. *Clin J Sports Med (In Press)*
- Shultz SJ, Sander TC, Kirk SE, Perrin DH. Sex Differences In Knee Joint Laxity Change Across The Female Menstrual Cycle. *Journal of Sports Medicine and Physical Fitness (In Press)*
- Perrin DH, Shultz SJ. Physical Rehabilitation and the Challenge of Anterior Cruciate Ligament Injury in the Physically Active Female. *Quest* 2005; 57:154-161 (Invited Paper)
- Cote KP, Brunet ME, Gansneder BM, Shultz SJ. Pronated and Supinated Foot Postures Effect both Static and Dynamic Postural Stability. *Journal of Athletic Training* 2005; 40:41-46
- Shultz SJ, Windley, TC, Kulas, AS, Schmitz, RJ, Valovich McLeod, TC, Perrin, DH. Low Levels of Anterior Tibial Loading Enhance Knee Extensor Reflex Response Characteristics. *Journal of Electromyography and Kinesiology* 2005;15:61-71
- Schmitz RJ, Shultz SJ, Kulas AS, Windley TC, Perrin DH. Kinematic Analysis of Functional Lower Body Perturbations. *Clinical Biomechanics* 2004; 19:1032-1039
- Carcia CR, Shultz SJ, Granata KP, Gansneder BM, Perrin DH. Knee Ligament Behavior Following a Controlled Loading Protocol Does Not Differ by Menstrual Cycle Day. *Clinical Biomechanics*. 2004; 19:1048-1054
- Tripp BL, Boswell LL, Shultz SJ. Functional Fatigue Decreases Three-dimensional Multi-joint Position Reproduction Acuity in the Overhead-throwing Athlete. *Journal of Athletic Training* 2004;39:316-320
- Valovich TC, Perrin DH, Guskiewicz KM, Shultz SJ, Diamond R, Gansneder BM. Serial Administration Of Clinical Concussion Assessments And Practice Effects In Healthy Young Athletes. *Clinical Journal of Sports Medicine* 2004; 14:287-295
- Susco TM, Valovich TC, Gansneder BG, Shultz SJ. Balance Recovers within Twenty Minutes Following Exertion as Measured by the Balance Error Scoring System. *Journal of Athletic Training*. 2004; 39: 241-246
- Shultz SJ, Sander TC, Kirk SE, Johnson ML, Perrin DH. Relationship Between Sex Hormones and Anterior Knee Laxity Across the Menstrual Cycle. *Medicine and Science in Sport and Exercise*. 2004; 36(7): 1165-1174
- Shultz SJ, Carcia CR, Perrin DH. Knee Joint Laxity Affects Muscle Activation Patterns in the Healthy Knee. *Journal of Electromyography and Kinesiology*. 2004; 14(4):475-483
- Gross SM, Carcia CR, Gansneder BM, Shultz SJ. Rate of Force Application During Knee Arthrometer Measurements Affects Stiffness But Not Displacement. *Journal of Orthopaedic and Sports Physical Therapy*. 2004; 34(3):132-9
- Hargrave MD, Carcia CR, Gansneder BM, Shultz SJ. Subtalar Pronation Does Not Affect Impact Forces and Absorption During a Single Leg Forefoot Landing. *Journal of Athletic Training*. 2003; 38:18-23
- Drouin JM, Valovich TC, Shultz SJ, Gansneder BM, & Perrin DH. Reliability and Validity of the Biodex™ System 3 Pro Isokinetic Dynamometer Velocity, Torque and Position Measurements. *European Journal of Applied Physiology*. 2003;91:22-29
- Demeritt KM, Shultz SJ, Gansneder BM, Docherty CL & Perrin DH. Functional Ankle Instability Does Not Effect Lower Extremity Functional Performance. *Journal of Athletic Training*. 2003;37:507-511
- Olmsted LC, Carcia CR, Hertel J, and Shultz SJ. The effect of functional ankle instability on performance of the star excursion balance test. *Journal of Athletic Training* 2003;37:501-506
- Moore BD, Drouin J, Gansneder BM, and Shultz SJ. The Effect of Gender and Fatigue on Electromechanical Delay in Elite Athletes. *Journal of Electromyography and Kinesiology*. 2002; 12:351-360
- Rose HM, Shultz SJ, Arnold BL, Gansneder BM & Perrin DH. Orthotic Intervention Does Not Effect Muscular Response Times and Activation Patterns at the Knee. *Journal of Athletic Training*. 2002;37:133-140.
- Shultz SJ, Perrin DH, Adams JM, Arnold BL, Gansneder BM & Granata KP. Neuromuscular Response Characteristics in Males and Females Following Knee Perturbation in a Single Leg Weight Bearing Stance. *Journal of Athletic Training*. 2001; 36(1):37-43
- Oshikoya CA, Shultz SJ, Mistry D, Perrin DH, Arnold BL & Gansneder BM. Effect of Coupling Medium Temperature on Rate of Intra-muscular Temperature Rise Using Continuous Ultrasound. *Journal of Athletic Training*. 2000; 35(4); 417-421

Shultz SJ, Perrin DH, Adams JM, Arnold BL, Gansneder BM & Granata KP. Assessment of Neuromuscular Response Characteristics at the Knee Following a Functional Perturbation. *Journal of Electromyography and Kinesiology*. 10(3):159-170, 2000

Shultz SJ & Perrin DH. Using Surface Electromyography to Assess Gender Differences in Neuromuscular Response Characteristics. *Journal of Athletic Training*. 1999; 34(2):165-176

Shultz SJ & Perrin DH. The Role of Dynamic Hamstring Activation in Preventing Knee Ligament Injury: Training Implications. *Athletic Therapy Today*. 1999; 4(3):49-53

Weldon GA, Snouse SL, & Shultz SJ. Normative Strength Values for Knee, Shoulder, Elbow and Ankle for Females Ages 9 - 73 as Determined by Isokinetic Testing. *Journal of Athletic Training*. 1988; 23(4):325-331

Refereed Abstracts

Shultz SJ, Shimokochi Y, Nguyen A, Ambegaonkar JP, Schmitz RJ, Beynnon BD, Perrin DH. Non-Weight Bearing Anterior Knee Laxity is Related to Anterior Tibial Translation During Transition from Non-Weight Bearing to Weight Bearing. *British Journal of Sports Medicine (In Press)*. Accepted for presentation at the 1st World Congress of Sport Injury Prevention; Oslo, Norway – June 2005.

Shultz SJ, Ambegaonkar JP, Botic TL, Kulas AS, Nguyen A, Shimokochi Y, Windley TC, Beynnon BD. Intratester and Intertester Reliability of Clinical Measures of Lower Extremity Anatomical Alignment. *Journal of Athletic Training (In Press)*

Ambegaonkar JP, Shultz SJ and Perrin DH. Lower Extremity Muscle Activity and Kinetic Patterns Differ Between Double-leg Drop Landings and Drop Jumps. *Journal of Athletic Training (In Press)*

Shimokochi Y, Schmitz RJ, Lee SY, Windley TC, Shultz SJ. Plantar Flexor To Dorsiflexor Isokinetic Eccentric Strength Ratio And Ankle Eversion Predict Tibial Internal Rotation During A Single-Leg Landing. *Journal of Athletic Training (In Press)*

Kulas AS, Schmitz RJ, Shultz SJ, Ulm, M, Perrin DH. Validation Of Abdominal Hollowing In Standing Versus 4 Point Kneeling And Prone Positions. *Medicine and Science in Sport and Exercise (In Press)*

Kulas AS, Windley TC, Schmitz RJ, Perrin DH, Shultz SJ. Sex Differences in Neuromuscular Responses to Knee Extension Perturbations as Evidenced by Reflex Timing, Amplitude and Knee Extension Moments. *Journal of Athletic Training*. 2004; 39(2):S16

Perrin DH, Kirk SE, Sander TC, Shultz SJ. Minimum Serum Hormone Levels at Menses Predict the Magnitude of Change in Knee Joint Laxity Across the Menstrual Cycle. *Journal of Athletic Training*. 2004; 39(2):S13

Sander TC, Gansneder BM, Bunker LK, Gaesser GA, Saliba EN, Perrin DH, Shultz SJ. Females Utilize Quadriceps Dominant Landing Strategies That Increase Knee Shear Forces and Internal Extension Moments. *Journal of Athletic Training*. 2004; 39(2):S110

Schmitz RJ, Shultz SJ, Kulas AS, Windley TC, Perrin DH. Between-Day 3D Kinematic Measurement Consistency during Lower Extremity Perturbations. *Journal of Athletic Training*. 2004; 39(2):S116

Martin NMG, Sanderson HL, Schmitz RJ, Perrin DH, Shultz SJ, Watson MA. Functional Fatigue Decreases Leg Spring Stiffness During Drop Landings. *Journal of Athletic Training*. 2004; 39(2):S113

Shultz SJ, Windley TC, Kulas AS, Schmitz RJ, Valovich- McLeod TC, Perrin DH. Within and Between Test Measurement Consistency Obtained From a Custom Reflex Testing Device. *Journal of Athletic Training*. 2004; 39(2):S116

Windley TC, Kulas AS, Shultz SJ, Perrin DH, Schmitz RJ. Navicular Drop Predicts Transverse Plane Knee Moments in a Single-Leg Weight-Bearing Perturbation. *Journal of Athletic Training*. 2004; 39(2):S30

Shultz SJ, ML Johnson, SE Kirk, TC Sander, DH Perrin. Sex Hormones Explain More Of The Variance In Anterior Knee Laxity Across The Menstrual Cycle When A Time Delay Is Considered. *Med Sci Sports Exer*. 2004; 36(5):S36

Perrin DH, SE Kirk, TC Sander, SJ Shultz. Sex Differences In Knee Joint Laxity Change Across The Female Menstrual Cycle. *Medicine and Science in Sports and Exercise*. 2004; 36(5):S151

Kulas TS, RJ Schmitz, TC Windley, SJ Shultz, DH Perrin. Pilot Investigation: Sex specific effects of abdominal maneuvers on lower extremity energetics during landings. *Medicine and Science in Sports and Exercise*. 2004; 36(5):S230

- Windley TC, Kulas AS, Schmitz RJ, Perrin DH, Shultz SJ. Tibiofemoral Angle, Not Q-angle, is Related to Frontal Plane Lower Extremity Kinematics During a Weight-Bearing Perturbation. *Medicine and Science in Sports and Exercise*. 2004; 36(5):S345-6
- Shultz SJ, Carcia CR, Perrin DH. Knee Joint Laxity Affects Muscle Activation Patterns at the Knee. *Journal of Orthopaedic and Sports Physical Therapy* 2003; 33(8):A20
- Anstee LJ, Docherty CL, Gansneder BM, Shultz SJ. Intertester and Intratester of a Functional Movement Screen. *Journal of Athletic Training*. 2003;38(2):S85
- Bell DR, Sander TC, Gansneder BM, Shultz SJ. Posterior Trunk Position Increases Reflex Amplitude at the Knee in Response to a Perturbation. *Journal of Athletic Training*. 2003;38(2):S103
- Carcia CR, Shultz SJ, Granata KP, Gansneder BM, Perrin DH. Controlled Anterior Loading Does Not Affect Knee Joint Behavior Across The Menstrual Cycle. *Journal of Athletic Training*. 2003;38(2):S14
- Drouin JM, Arnold BL, Gansneder BM, Shultz SJ, Perrin, DH. The Relationship Between Muscular Amplitude During a Stepping Task and Subjectively Reported Ankle Instability. *Journal of Athletic Training*. 2003;38(2):S12
- Eggen JM, Carcia CR, Gansneder BM, Shultz SJ. Hip Abductor Fatigue Affects Knee Motion Following a Drop Jump. *Journal of Athletic Training*. 2003;38(2):S22
- Gross SM, Carcia CR, Gansneder BM, Shultz SJ. Rate of Force Application Affects Stiffness but not Displacement Measures with the KT 2000. *Journal of Athletic Training*. 2003;38(2):S111
- Kelly TK, Zinder SM, Gansneder BM, Shultz SJ. The Effect of Peroneal Muscle Fatigue on Medial/Lateral Ankle Stiffness. *Journal of Athletic Training*. 2003;38(2):S50
- Murrell ML, Sander TC, Gansneder BM, Shultz SJ. Moderate Exertion Does Not Substantially Affect Neuromuscular Characteristics of the Lower Extremity Following a Knee Perturbation. *Journal of Athletic Training*. 2003;38(2):S49
- Susco TM, Valovich TC, Gansneder BG, Shultz SJ. Balance Recovers within Twenty Minutes Following Exertion as Measured by the Balance Error Scoring System. *Journal of Athletic Training*. 2003;38(2):S104
- Tripp BL, Boswell LL, Gansneder BM, Shultz SJ. The effect of functional fatigue on active multi-joint position reproduction of the throwing shoulder. *Journal of Athletic Training*. 2003;38(2):S71
- Valovich TC, Perrin DH, Guskiewicz KM, Diamond R, Shultz SJ, Gansneder BM. Test-retest Reliability and Reliable Change Index Scores of the Standardized Assessment of Concussion and Balance Error Scoring System in Young Athletes. *Journal of Athletic Training*. 2003;38(2):S27
- Zinder SM, Shultz SJ, Gansneder BM, Gieck JH, Granata KP. Ankle braces improve passive but not active ankle stability in functionally unstable and healthy subjects. *Journal of Athletic Training* 2003;38(2):S51
- Shultz SJ, Perrin DH (FACSM), Sander TC, Kirk SE. Knee Laxity But Not Compliance Increases Across The Menstrual Cycle. *Medicine Science in Sports & Exercise*. 2003; 35(5):S81
- Valovich TC, Guskiewicz KM, Diamond R, Shultz SJ, Gansneder BM, Perrin DH (FACSM). Practice Effects With Serial Administration Of Clinical Concussion Assessments In Healthy Young Athletes. *Medicine Science in Sports & Exercise*. 2003; 35(5):S247.
- Sander TC, Shultz SJ, Gansneder BM. Muscular Cocontraction Increases Muscular Preactivity and Reflex Peak Amplitude After Functional Knee Perturbations. *Journal of Orthopaedic and Sports Physical Therapy*. 2003;33(2):A51
- Shultz S.J., Carcia C.R., Gansneder B.G., Perrin D.H. Lower Extremity Limb Alignment Effects Neuromuscular Activation Patterns in Weight Bearing. *Journal of Athletic Training*. . 2002; 37(2):S28
- Shultz S.J., Carcia C.R. & Hargrave M.D. Gender Differences in Muscle Activation Patterns and Peak Vertical Force During a Single Leg Forefoot Landing. *Journal of Athletic Training*. 2002; 37(2):S19
- Cote K, Brunet ME, & Shultz SJ. The Effect of Foot Type on Static and Dynamic Postural Balance. *Journal of Athletic Training*. 2002; 37(2):S93
- D'Amico JD, Boswell LL & Shultz SJ. The Effect of Fatigue on Dynamic Balance in Subjects with Functional Unstable vs Stable Ankles. *Journal of Athletic Training*. 2002; 37(2):S22
- Hargrave MD, Carcia CR, Shultz SJ, & Gansneder BM. Subtalar Pronation Does Not Affect Impact Forces and Absorption During a Single Leg Forefoot Landing. *Journal of Athletic Training*. 2002; 37(2):S26

- Terranova A, Zinder SM & Shultz SJ. The Effect of Functional Ankle Instability and Taping on Peroneal Muscle Latency Following a Sudden Inversion Perturbation. *Journal of Athletic Training*. 2002; 37(2):S21
- Perrin DH, Shultz SJ, Sander TC, Carcia CR. Reliability of Ligament Compliance and Tibial Displacement Measures Obtained from Two Knee Arthrometers. *Medicine and Science in Sports and Exercise*. 2002; 34(5):S147
- Shultz SJ, Sander TC, Carcia CR, Perrin DH. Knee Arthrometer Measurement Consistency of Slope and Displacement as Calculated by Software that Replaces Radiography. *Medicine and Science in Sports and Exercise*. 2002; 34(5):S147
- Sander TC, Shultz SJ, Carcia CR, Perrin DH. Knee Arthrometer Measurement Stability of Anterior Displacement and Ligament Compliance Across Repeated Trials. *Medicine and Science in Sports and Exercise*. 2002; 34(5):S147
- Zinder SM, Granata KP, Perrin DH, Arnold BL, Shultz SJ, & Gansneder BM. Reliability and Validity of Inversion/Eversion Effective Ankle Stiffness Measurement. *Med Sci Sports Exer* 2002; 34(5):S178
- Shultz SJ, Carcia CR & Perrin DH. Performance Consistency of Reflex Response Times Following a Lower Extremity Functional Perturbation. *Medicine and Science in Sports and Exercise*. 2001;33(5):S89
- Carcia CR, Shultz SJ, & Perrin DH. Neuromuscular Recruitment at the Knee Following a Functional Perturbation at Three Knee Flexion Angles. *Medicine and Science in Sports and Exercise*. 2001;33(5):S89
- Shultz SJ, Perrin DH, Gansneder BM, Granata KP, Adams JM & Arnold BL. Effect of Lower Extremity Limb Alignment on Muscular Activation Patterns. *ACL Injuries: The Gender Bias - National Research Retreat I. Lexington, KY - April 2001. Journal of Clinical Biomechanics (Reprint of Previous Abstract)*
- Shultz SJ, Changes in Knee Joint Compliance Index and Maximal Displacement Across the Menstrual Cycle. *ACL Injuries: The Gender Bias - National Research Retreat I. Lexington, KY - April 2001. Journal of Clinical Biomechanics (Accepted - Reprint of Previous Abstract)*
- Depp TM, Padua DP, Shultz SJ, Gansneder BM. The Effects of Foot Orthotics on Muscle Activation Patterns in Selected Lower Extremity Muscles. *Journal of Athletic Training*. 2001; 36(2):S65
- Drouin JM, Valovich TC, Shultz SJ, Perrin DH, Gansneder BM. Validity of the Biodex™ System 3 Pro Isokinetic Dynamometer Position, Torque and Velocity Measurements. *Journal of Athletic Training*. 2001;36(2):S103
- Moore BD, Drouin J, Shultz SJ, Gansneder BM. The Effect of Gender and Fatigue on Electromechanical Delay in Elite Athletes. *Journal of Athletic Training*. 2001; 36(2):S9
- Olmsted LC, Carcia CR, Shultz SJ, Gansneder BM. The Effect of Functional Ankle Instability on Performance of the Star Excursion Balance Test. *Journal of Athletic Training*. 2001; 36(2):S75
- Teprovich JM, King MA, Perrin DH, Gansneder BM, Shultz SJ. Functional Playing Position Does Not Effect Quadriceps and Hamstring Average Torque and Muscle Group Ratios in Division I Female Field Hockey and Lacrosse Players. *Journal of Athletic Training* 2001;36(2):85
- Valovich TC, Drouin JM, Shultz SJ, Perrin DH, Gansneder BM. Reliability of the Biodex™ System 3 Pro Isokinetic Dynamometer Velocity, Torque and Position Measurements. *Journal of Athletic Training*. 2001;36(2):S103
- Demeritt KM, Shultz SJ, Perrin DH, Gansneder BM. Functional Ankle Instability Does Not Effect Lower Extremity Functional Performance. *Journal of Athletic Training*. 2000; 34(2):S39
- Hobbs MC, Shultz SJ, Arnold BL, Gansneder BM. Changes in Knee Joint Compliance Index and Maximal Displacement across the Menstrual Cycle. *Journal of Athletic Training*. 2000; 34(2):S37
- Rose HM, Shultz SJ, Arnold BL, Gansneder BM. The Effect of Orthotic Intervention on Muscular Response Times and Activation Patterns at the Knee. *Journal of Athletic Training*. 2000; 34(2):S32
- Shultz SJ, Perrin DH, Gansneder BM, Granata KP, Adams JM & Arnold BL. Effect of Lower Extremity Limb Alignment on Muscular Activation Patterns. *Medicine and Science in Sports and Exercise*. 1999; 31(5):S284
- Shultz SJ, Perrin DH, Gansneder BM, Granata KP, Adams JM & Arnold BL. Neuromuscular Response Characteristics in Males and Females Following Knee Perturbation. *Journal of Athletic Training*. 34(2):S11
- Oshikoya CA, Shultz SJ, Perrin DH, Arnold BL, Mistry D & Gansneder BM. Effect of Coupling Medium Temperature on Rate of Intra-muscular Temperature Rise Using Continuous Ultrasound. *Journal of Athletic Training*. 1999; 34(2):S74

Book

Shultz, S.J., Houglum, P.A. & Perrin, D.H.. Examination of Musculoskeletal Injuries. 2nd Edition. Human Kinetics: Champaign, IL. (In Press – Anticipated Release Date May, 2005)

Shultz, S.J., Houglum, P.A. & Perrin, D.H.. Assessment of Athletic Injuries. Human Kinetics: Champaign, IL. 2000.

Book Chapters

Shultz S.J. Introduction to Grant Writing and Research Funding Sources. 2005. In: Arnold B.L., Perrin D.H. & Ganseder B.G. Research in Athletic Training. Philadelphia: F.A. Davis; Chapter 19.

Perrin D.H., Shultz S.J. Models for clinical research involving proprioception and neuromuscular control. 2000. In: Lephart SM, Fu FH, eds. Proprioception and Neuromuscular Control in Joint Stability. Champaign: Human Kinetics.

Book Ancillaries / Multimedia Publications

Valovich, T.C. for Shultz, S.J., Houglum P.A. & Perrin, D.H.. Assessment of Athletic Injuries Graphics Package (CD ROM). Human Kinetics: Champaign, IL. 2000.

Valovich, T.C. for Shultz, S.J., Houglum, P.A. & Perrin, D.H.. Assessment of Athletic Injuries Instructor Guide and Test Package (CD ROM). Human Kinetics: Champaign, IL. 2000.

Monographs / Handbooks

Shultz, S.J., Valovich, T.C. & Zinder, S.M. Sports Medicine Handbook. 3rd Edition. National Federation of State High School Associations: Indianapolis, IN. In Press.

Shultz, S.J., Valovich, T.C. & Zinder, S.M. Sports Medicine Handbook. 2nd Edition. National Federation of State High School Associations: Indianapolis, IN. 2002.

Shultz, S.J., NFL Youth Football Project. Series of articles on the topic of Strength and Conditioning specific to youth football sport participation. “*Essential Components of a Strength and Conditioning Program*”, “*Proper Warm Up and Cool Down*”, and “*When Not to Ignore Aches and Pains*”. National Football League, 2002.

Shultz, S.J., Zinder, S.M. & Valovich, T.C. Sports Medicine Handbook. National Federation of State High School Associations: Indianapolis, IN. 2001.

Shultz, S.J., Rudd, D.A., Miller, D.A. & Dixon-Burns, A. Revised Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics. National Athletic Trainers Association; Dallas, TX. March 2003

Shultz, S.J., Rudd, D.A., Miller, D.A. & Dixon-Burns, A. Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics. National Athletic Trainers Association; Dallas, TX. March 2000

Book Reviews (Published)

Bompa, T.O. & Cornacchia, L.J. Serious Strength Training. *Journal of Athletic Training*, 33(4): 381, 1998

INSTRUCTION

Teaching

University of North Carolina @ Greensboro: Department of Exercise & Sport Sciences

“*Neural Aspects of Motor Control (ESS 711): Co-Instructor*”

Spring 2004

“*Seminar in Grant Writing*” (ESS 798): Instructor

Fall 2003, 2004

“*Management and Professional Issues in Athletic Training*” (ESS 725): Co-Instructor

Fall 2003, 2004

“*Therapeutic Techniques in Rehabilitating Athletic Injuries*” (ESS 640): Instructor

Spring 2003, 2004, 2005

“*Clinical Education III: Athletic Injury Assessment*” (ESS 541): Co-Instructor

Fall 2002

University of Virginia: Department of Human Services

“*Orthopedic Basis of Sport Injury*” (EDHS 841): Instructor

Spring 2002

"Emergency Medical Care" (EDHS 451/552): Instructor	Spring 2000, 2001, 2002
"Seminar in Educational Research" (EDHS 744): Co-Instructor	Spring 2000, 2001, 2002
"Masters Thesis: Research in Athletic Training" (EDHS 899): Co-Instructor	Fall & Spring 1999-2002
"Current Trends in Athletic Training" (EDHS 850): Instructor	Fall 1999, 2000, 2001
"Doctoral Seminar in Grant Writing" (EDHS 850): Instructor	Fall 2000
"Instrumentation in Clinical Assessment and Sports Medicine Research" (EDHS 589): Instructor	Spring & Fall 1999
"Masters Thesis: Research in Athletic Training" (EDHS 899): Teaching Assistant	Fall & Spring 1997-98
"Anatomical Basis of Sports Medicine" (EDHS 758): Graduate Assistant Instructor	Summer 1998
"Skeletal Biomechanics" (BIOM 793): Guest Lecturer	Fall, 2000
"Orthopaedic Basis of Athletic Training" (EDHS 841): Guest Lecturer	Spring 1998 & 1999
"Advanced Athletic Training" (EDHS 589): Guest Lecturer	Spring 1998

UCLA Extension: Department of Humanities, Sciences and Social Sciences

"Basic Care and Prevention of Athletic Injuries" (X457.5)	Winter 1995 & 1996
"Advanced Athletic Training: Evaluation of Athletic Injuries" (X457.4)	Spring 1993 & 1994
"Prevention and Recognition of Injuries for Fitness Instructors" (X468)	Winter 1994

California State University, Fullerton: Depart. of Kinesiology and Health Promotions

"Rehabilitation and Therapeutic Modalities" (PHED 367): Co-Instructor	Fall 1993 & 1994
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SERVICE

University Service

University of North Carolina at Greensboro

Undergraduate Research Committee September 2003 – Present

This University Wide committee is intended to support undergraduate research activities on campus, including the review and selection of candidates for undergraduate research internships.

Faculty Search Committees

Senior Faculty Member, Department of Public Health Education October 2003 – June 2004

Senior Research Professor (2 positions), Office of the Provost November 2003 – Present

Athletic Training Program Director – Open Rank, Department of Exercise & Sport Science January 2004-May 2004

External Grant Reviewer February 2004

NCARS Proposal: "Effect of Exercise Training During Lactation on Maternal Bone Status". C. Lovelady, Principal Investigator. School of Human Environmental Sciences.

Grant Writing Workshop Selection Committee April 2003

Committee selected by the Associate Provost for Research to review applications and select participants for a one-year intensive grant writing course.

Program Director – CAAHEP Accredited Entry Level Masters Degree Program in Athletic Training 2002 – 2004

Responsible for overall direction of the CAAHEP Accredited Entry Level Masters Degree Program; including admission and retention of students, on-going program evaluation, curricular revisions, student orientation and advisement, coordination of in-services, and preparation of annual reports to the Joint Review Committee on Athletic Training Programs.

CAAHEP Accreditation Committee – Entry Level Masters' Degree Program August 2002 - April 2003

Assisted with completion of the self-study document, and in coordination and preparation for the site-visit. Responsible for the preparation and submission of the UNCG Site Visit Rejoinder.

University of Virginia

Interim Program Director- Graduate Program in Athletic Training 2001-02

Responsible for overall direction of the NATA Accredited Post-Certified Masters Degree Program in Athletic Training; including admission and retention of students, student advisement, program evaluation and annual reporting.

NATA Accreditation Self Study Committee – Advanced Graduate Program in Athletic Training 1999 - 2000

Assisted with completion of the self-study document, and in the coordination and preparation for the site-visit.

Professional Organizations / Committees - National***National Athletic Trainers' Association***

Convention Committee 2003-Present
 Committee Chair (2004-present); Chair Elect (2003-04). Oversee the planning and organization of the NATA's Annual Meeting and Clinical Symposia for ~10,000 attendees

Appropriate Medical Care for Secondary School Athletes Task Force 2002-Present
 Writing Team / Research Consultant, Task Force Member. The mission of this task force (comprised of physician, allied health professional, and high school athletic administrative organizations) was to write a consensus statement and background document providing recommendation and guidelines for appropriate medical care of secondary school aged athletes.

Strategic Planning Task Force 2001-2002
 Task Force Member; Team Leader for Strengthening Credibility and Visibility. To develop a strategic plan for the National Athletic Trainers' Association to clarify and strengthen professional and public identity; increase funding levels; and effectively address the employment reimbursement, education and regulatory issues affecting the membership.

Convention Committee 1998-2002
 Organization and planning of educational programming for the NATA's Annual Meeting and Clinical Symposium; Clinical Program Sub-Committee Chair planning 65 Workshops, Dallas, TX - June, 2002; Clinical Program Sub-Committee Chair planning 16 Symposia Sessions, Los Angeles, CA - June, 2001; Clinical Program Sub-Committee Chair planning 12 Minicourses, Nashville, TN - June, 2000

Appropriate Medical Coverage for Intercollegiate Athletics Task Force 1998-2003
 Writing Group Chair; Committee Member. To develop and publish recommendations and guidelines for appropriate medical coverage and care of intercollegiate athletes.

Pronouncements Committee 1997-2004
 Committee member. Oversee the development, review and approval of NATA Position Statements on Lightning Safety (2000), Fluid Replacement (2000), Emergency Planning (2002), Exertional Heat Illness (2002), Spearing (2004), and Sport Related Concussion (2004).

Education Council - Entry Level Education Committee 1997-2000
 Committee member. A sub-committee of the National Athletic Trainers' Association Education Council, providing direction, guidelines and resources for entry-level athletic training education programs.

District Secretary and Treasurer's Committee 1996-1999
 Committee member. A committee comprised of the district secretaries and treasurers of the 10 districts of the NATA, to address membership, financial and organization issues.

College and University Athletic Trainers Committee 1994 - 1996
 Committee member, 1994-1996; Task Force Member, 1993-94. Mission is to 1) promote institutional ownership in the integrated health care delivery system in intercollegiate athletics; 2) identify and address issues related to the health and safety of the student athlete; and 3) address concerns of the certified athletic trainer in the collegiate setting.

Joint Review Committee on Athletic Training Education Programs (JRC-AT)

Site-Visitor; Long Island University, Brooklyn, NY Spring 2004

American College of Sports Medicine 1998 - Present
 Member #126976

National Strength and Conditioning Association 1988 - Present
 Certified Member

REEBOK C.O.R.P.S. Program 1991 - 1996
 Member

Professional Organizations / Committees - Regional

<i>Mid Atlantic Athletic Trainers' Association</i> Certified Member	<i>1999 - Present</i>
<i>Far West Athletic Trainers' Association</i> District Secretary-Treasurer (1996-1999) College and University Athletic Trainers Committee, Chair (1994 - 1996)	<i>1980 - 1999</i>

Professional Organizations / Committees - State or Local

<i>North Carolina Athletic Trainer's Association</i> Certified Member	<i>2002 - Present</i>
<i>Virginia Athletic Trainer's Association</i> Certified Member	<i>1999 - 2002</i>
<i>California Athletic Trainer's Association</i> Treasurer: Political Action Committee (1987-1990)	<i>1985 - 1999</i>

Consultant / Panelist / Advisory Roles

<i>Hunt Valley II: Consensus Conference on ACL Injury Prevention Programs</i> Participant and Presenter: Impact of Prevention Programs on Agonist/Antagonist Strength Ratios Sponsored by the American Orthopaedic Society for Sports Medicine; Atlanta, GA	<i>January, 2005</i>
<i>Greensboro Youth Soccer Sports Medicine Consortium</i> This non-profit group of sports medicine and fitness professionals are developing a web site and educational materials with the goal of "Soccer-related Injury Prevention through Education and Performance Enhancement"	<i>September 2002 – Present</i>
<i>Sports Health Care Community Advisory Committee</i> Arizona School of Health Sciences; Mesa Arizona The committee serves to insure the ASHS Sport Health Care Program remains in the professional forefront, exceeds accreditation requirements, attracts qualified students and faculty, and improves the health within their community, the nation and profession.	<i>October 2002 – Present</i>
<i>AOSSM, NATA & NCAA Consensus Group on Non-Contact ACL Injury</i> Participant: Development of a Consensus Statement on Non-Contact ACL Injuries; Hunt Valley, MD	<i>June 1999</i>
<i>National Collegiate Athletic Association</i> Participant: Anterior Cruciate Ligament Study Group	<i>1996 - 2000</i>
<i>Reebok Women's Sports Training Program</i> Technical Consultant / Development Team	<i>1995 -1996</i>
<i>United States Tennis Association - Player Development Program</i> Sports Science Advisor	<i>1989 - 1992</i>

Editorial

<i>Journal of Athletic Training (Editorial Board)</i>	<i>August 2000 - Present</i>
<i>Journal of Athletic Training (Editorial Assistant)</i>	<i>September 1996 - May 2000</i>

Manuscript Reviewer

<i>Journal of Athletic Training</i>	<i>1997 – Present</i>
<i>Journal of Bone and Joint Surgery</i>	<i>2003</i>
<i>British Journal of Sports Medicine</i>	<i>2001</i>

Grant Reviewer

<i>National Athletic Trainers' Association - Research and Education Foundation</i>	<i>2000-Present</i>
<i>University of Florida - Doctoral Student Grant Proposal</i>	<i>2000</i>

Book Reviewer**Human Kinetics Publishers**

March 2001

Delforge, G. Sports Injury Management: A Problem Solving Approach. Human Kinetics: Champaign, IL**Athletic Training Service****Area Medical Coordinator**

United States Olympic Festival

Los Angeles, July 1991

Athletic Trainer

USA Track and Field vs. Great Britain

Edinburgh Scotland; June 1993

Sunkist Indoor Track Meet

Los Angeles; California 1985 - 1993

PAC - 10 Women's Basketball All-Star Tour

Belgium & France; August 1992

Volvo Men's Professional Tennis Tournament

Los Angeles; August 1990 & 1991

World Cup / ADT London Marathon

London, England; April 1991

Mobil / USA Track and Field National Championships

Cerritos, California; July 1990

Women's International Ekiden

Yokohama, Japan; February 1990

Los Angeles Times Indoor Track Meet

Los Angeles, California; 1985 - 1990

Games of the XXIII Olympiad

Los Angeles, California; July / August 1984

Professional Presentations - NationalNational Athletic Trainers' Association 53rd Annual Meeting and Clinical Symposium; Dallas, TX
Symposium; "Advances in ACL Management; Influence of Sex Hormones on Knee Joint Function"

June, 2004

American Medical Society of Sports Medicine; Vancouver, British Columbia
NATA Research Lecture Exchange; "ACL Injury in the Female Athlete: Assessment of Neuromuscular
Risk Factors"

April, 2004

National Athletic Trainers' Association 53rd Annual Meeting and Clinical Symposium; Dallas, TX
Distinguished Scholars Session; Freddie H. Fu, MD New Investigator Award Presentation,
"ACL Injury in the Female Athlete: Assessment of Neuromuscular Risk Factors"

June, 2003

National Athletic Trainers' Association 53rd Annual Meeting and Clinical Symposium; Dallas, TX
Researcher's Forum: "Quantification of Muscle Function - Electromyography"

June, 2002

American College of Sports Medicine Annual Meeting; St. Louis, MO

May 2002

Mini-Symposium: "Update on ACL Injuries in the Female Athlete: Anatomical Risk Factors in ACL Injury"

American College of Sports Medicine Annual Meeting; St. Louis, MO

May 2002

Mini-Symposium: "Proprioception: Mechanisms and Measurement"

"Factors Influencing Reactive Neuromuscular Responses Following Lower Extremity Perturbation"

16th Annual Hawkeye Sports Medicine Symposium and University of Iowa Inaugural Orthopaedic
Sports Medicine Society Meeting for Orthopaedic Surgeons; Iowa City, IA
"ACL Injuries in Female Athletes: Assessment of Risk Factors" &
"Role of Hamstring Co-Activation in Preventing and Rehabilitating ACL Injuries."

December 2000

National Athletic Trainers' Association 51st Annual Meeting and Clinical Symposium; Nashville, TN
"Enhancing Hamstring Co-Activity and Functional Knee Stability Through Training" (Workshop)

June 2000

National Athletic Trainers' Association 51st Annual Meeting and Clinical Symposium; Nashville, TN
Specialty Day Symposium sponsored by the College and University Athletic Trainers Committee:
"Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"

June 2000

American College of Sports Medicine Annual Meeting; Indianapolis, IN

May 2000

"Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"

American Medical Society for Sports Medicine Annual Meeting; Sand Diego, CA

April 2000

"Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"

<i>National Association of Intercollegiate Athletics Annual Meeting</i> "Appropriate Medical Coverage in Intercollegiate Athletics"	October 1999
<i>National Athletic Trainers' Association 50th Annual Meeting & Clinical Symposium; Kansas City, MO</i> "Enhancing Hamstring Co-Activity and Functional Knee Stability Through Training" (Workshop)	June 1999
<i>American College of Sports Medicine 46th Annual Meeting; Seattle, WA</i> Symposium on Anterior Cruciate Ligament Injury in the Female Athlete: "Gender Differences in Neuromuscular Response Characteristics Following Knee Perturbation in a Functional Weight Bearing Stance"	June 1999
<i>NATA Annual Meeting and Clinical Symposia; Baltimore, MD</i> "The Role of Dynamic Stability in Preventing Knee Ligament Injury: A Comparison of Neuromuscular Response Characteristics in Males and Females"	June 1998
<i>NATA Annual Meeting and Clinical Symposia; Orlando, FL</i> "Use of Sport Cord in Exercise and Rehabilitation"	June 1996

Professional Presentations - Regional / State / Local

<i>2002 University of Virginia General Clinical Research Center Scientific Symposium; Charlottesville</i> "Gender, Hormones and Anterior Cruciate Ligament Compliance"	Oct 2002
<i>The Distinguished Lecture Series in Sports Medicine; Hope College, Holland MI</i> "Strategies for Preventing Knee Injuries in Female Athletes"	November 2002
<i>29th Annual Art and Science of Sports Medicine Symposium; University of Virginia, Charlottesville</i> "Current Trends and the Gender Bias of ACL Injury"	June 2002
<i>Mid-Atlantic Athletic Trainers Association Annual Meeting; Virginia Beach, VA</i> "Implementation Strategies for Containing the Cost of Appropriate Medical Coverage"	May 2002
<i>Sports Medicine Expo; "Intra-Articular Tibio-Femoral Injuries in the Athlete"</i> <i>Middle Tennessee State University; Murfreesboro, TN</i> "Current Status of ACL Injuries in Female Athletes"	April 2002
<i>South Eastern Athletic Trainers Association Annual Meeting; Atlanta, GA</i> "Implementation Strategies for Containing the Cost of Appropriate Medical Coverage"	March 2002
<i>Virginia Horne Henry Lecture Series; University of Wisconsin, Madison WI</i> "Anterior Cruciate Ligament Injury in the Female Athlete: Assessment of Neuromuscular Risk Factors"	March 2002
<i>Southwest Athletic Trainers' Association Annual Meeting – Arlington, TX</i> "Update on Implementation of NATA Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	July 2001
<i>Missouri Valley Conference Athletic Directors Educational Forum - Bronson, MO</i> "Review and Implementation Strategies of NATA Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	May 2001
<i>Mid Atlantic Athletic Trainers' Association Annual Meeting - Greenville, SC</i> "Update on Implementation of NATA Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	May 2001
<i>Pennsylvania State University Department of Kinesiology's Colloquium Series - State College, PA</i> "Neuromuscular Contributions to ACL Injury in the Female Athlete"	March 2001
<i>Pennsylvania State University Dept of Kinesiology's Student Athletic Training Club - State College, PA</i> "Professional Issues in Athletic Training"	March 2001

<i>South Eastern Athletic Trainers' Association Annual Meeting - Atlanta, GA,</i> "Update on Implementation of NATA Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	<i>March 2000</i>
<i>Southwest Athletic Trainers' Association; Arlington, TX</i> "Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	<i>July 2000</i>
<i>Mid Atlantic Athletic Trainers' Association Annual Meeting; Greenville, SC</i> "Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	<i>May 2000</i>
<i>Mid Atlantic Athletic Trainers' Association Annual Meeting; Greenville, SC</i> "Anterior Cruciate Ligament Injury in the Female Athlete: Assessment of Risk Factors"	<i>May 2000</i>
<i>South Eastern Athletic Trainers' Association Annual Meeting</i> "Recommendations and Guidelines for Appropriate Medical Coverage in Intercollegiate Athletics"	<i>March 2000</i>
<i>University of Virginia 26th Annual Arts and Science of Sports Medicine Conference</i> "Anterior Cruciate Ligament Injury in the Female Athlete: Assessment of Risk Factors"	<i>June 1999</i>
<i>Joint Gait Lab / Sports Medicine Research Laboratories Neuromechanics Seminar; Univ. of Virginia</i> "Assessing Neuromuscular Response Characteristics at the Knee Following Perturbation in a Weight Bearing Stance"	<i>December 1998</i>
<i>FWATA Annual Meeting and Clinical Symposia; Honolulu, HI</i> "Neuromuscular Response Characteristics Following Knee Perturbation"	<i>July 1998</i>
<i>The Art and Science of Sports Medicine Post Graduate Course; University of Virginia</i> "Overtraining in Athletics: Recognition and Prevention"	<i>June 1997</i>
<i>UCLA Extension: Japanese Sport Institute and Apple Sport College - Summer Intensive Program for Fitness Instructors; Los Angeles, CA</i> "Prevention and Care of Athletic Related Injuries" "Reconditioning of Athletic Related Injuries" "Supportive Taping and Bracing Workshop"	<i>Summer 1994 & 1995</i>
<i>UCLA Extension: ACSM Review Course; Los Angeles, CA</i> "Emergency Procedures, Prevention & Recognition of Injuries and Low Back Care"	<i>March 1994</i>
<i>UCLA 8th Annual Sports Medicine Symposium; Los Angeles, CA</i> "Functional Training of the Shoulder Complex"	<i>May 1993</i>
<i>AAF / CIF Coaches Educational Program; Los Angeles, CA</i> "Care and Prevention of Track and Field Injuries"	<i>August 1991</i>
<i>TRACC Sport Medicine 7th Anniversary Seminar on Women in Sport; Los Angeles, CA</i> "Strength Training: Developing a Program to Fit Your Needs"	<i>October 1989</i>
<i>AFAA Specialty Workshop on Low Weight / Low Impact Aerobics; Los Angeles, CA</i> "Principles of Strength Training"	<i>September 1986</i>
<i>Judi Garman's Softball Clinic For Coaches; Fullerton, CA</i> "Problems Particular to the Female Athlete"	<i>January 1985</i>
<i>California State University, Fullerton: Upper Division Athletic Training Courses</i> "Anorexia and Bulimia in Athletics"	<i>Fall 1983</i>

Conference / Symposium / Workshop Participant

- Participant, Site Visitor Workshop* June 2004
Joint Review Committee for Athletic Training Programs; Baltimore, MD
- Moderator & Lead Discussant, ACL Injuries – The Gender Bias Research Retreat II.* April 2003
Moderated the session on Hormonal Factors, Assisted with writing of the consensus statement for Neuromuscular Factors; Lexington, KY
- Participant, Faculty Grant Writing Workshop* September 2002 – June 2003
University of North Carolina at Greensboro, Greensboro, NC
- Moderator, “Advance Track: Management of Acute Illness in the Athletic Training Room”* June, 2002
National Athletic Trainers' Association Annual Meeting and Clinical Symposium, Dallas, TX
- Moderator, "Update on ACL Injury Risk Factors and Prevention Strategies in the Female Athlete"* June, 2001
National Athletic Trainers' Association Annual Meeting and Clinical Symposium, Los Angeles, CA
- Moderator, J&J Symposium: "Valgus Overload Injury Continuum of the Elbow"* June, 2001
National Athletic Trainers' Association Annual Meeting and Clinical Symposium, Los Angeles, CA

Media Interviews

- UNCG Research Magazine; University of North Carolina Greensboro* May 2004
“Staying in the Game”; An article highlighting the research of Drs. Shultz and Perrin on ACL Injuries in Females
- With Good Reason; Virginia Radio Broadcast –Charlottesville, VA* February 2002
“Shaky Knees and Pain”; Discussing risk factors and care of knee injuries in females
- Training and Conditioning Journal* October 2001
“Unreasonable Expectations” Article addressing Appropriate Medical Coverage in Intercollegiate Athletics
- Virginia Radio Network; Charlottesville VA* December 2000
Radio Interview Discussing Current Research in Assessment of ACL Injury Risk in Females
- Inside UVA* December 1, 2000
Interview for feature article "When Women Get Physical, Knees Take the Brunt of It", highlighting Perrin DH and Shultz SJ research and funding of ACL injury risk factors in the female athlete
- Daily Progress; Regional and State Section* December 1, 2000
Interview for feature article "UVa Receives \$275,000 grant to study knee injuries in women"
- WWKY.790 Radio Talk Show; Louisville, KY* December 1996
Guest on "Active Lifestyles", Hosted by David Conrad

HONORS and AWARDS

National

- 2003 *Freddie H. Fu, MD New Investigator Award*; National Athletic Trainers Association Research & Education Foundation
- 2001 *Journal of Athletic Training Kenneth L. Knight Award for the Outstanding Research Manuscript: “Neuromuscular Response Characteristics in Men and Women after Knee Perturbation in a Single -leg, Weight-bearing Stance”*

Regional

- National Athletic Trainers' Association Special Recognition Award, April 2001*; For service to the profession of athletic training and the Far West Athletic Trainers' Association

Local

- Summer Excellence Award – University of North Carolina at Greensboro; Summer 2005*
- Summer Teaching Enhancement Award – University of Virginia, June 2001; \$600*
- Mosaic Technologies Doctoral Student Award - University of Virginia April 1999; \$500*