CURRICULUM VITAE ROBERT W. CHRISTINA DEAN AND PROFESSOR EMERITUS SCHOOL OF HEALTH AND HUMAN SCIENCES UNIVERSITY OF NORTH CAROLINA AT GREENSBORO

UNIVERSITY ADDRESS

HOME ADDRESS

School of Health and Human Sciences 401 HHP Building University of North Carolina at Greensboro P.O. Box 26169 Greensboro, NC 27402-6169 rchristina@uncg.edu 4501 Highberry Road Greensboro, NC 27410 (336) 294-1713 (Office) (336) 601-2776 (Cell)

FORMAL EDUCATION

University of Maryland, College Park, MD Ph.D. 1970

Major: Kinesiology--Motor Control & Learning

Minors: Experimental and Physiological Psychology; Measurement & Applied Statistics Dissertation: *Proprioception as a Basis for the Anticipatory Timing of Motor Responses*

University of Maryland, College Park, MD M.A. 1965

Major: Kinesiology--Motor Control & Learning

Minor: Exercise Physiology

Thesis: An Investigation of the Side Arm Positional Test of Kinesthetic Sense

Ithaca College, Ithaca, NY B.S. 1962

Major: Physical Education (Cum Laude)

Minor: Health Education

PROFESSIONAL EXPERIENCE

2001- **Retired** as **Dean Emeritus** of the School of Health and Human Sciences and **Professor Emeritus** in the Department of Kinesiology, University of North Carolina at Greensboro (UNCG)

1992-2001 **Dean** of the School of Health and Human Sciences and **Professor** in the Department of Kinesiology, UNCG.

1989-92 Chair of the Department of Physical Therapy and Exercise Science and Professor in the Department of Physical Therapy and Exercise Science. Director of the Motor Control Research Laboratory in the School of Health Related Professions, State University of New York at Buffalo. Member of the University Graduate Faculty. Project Supervisor for NIH Post-Doctoral Fellowship to conduct medical rehabilitation research. Graduate Faculty member in the Center of Disability Research.

1973-89 **Professor** in the Department of Kinesiology and Director of the Motor Behavior Research Laboratory in the College of Health and Human Development at The Pennsylvania State University (1979-89). Senior member of the Graduate Faculty and faculty member of the Inter-College Program in Applied Physiology.

Associate Professor in the Department of Kinesiology and Director of the Motor Behavior Research Laboratory at The Pennsylvania State University, College of Health, Physical Education and Recreation (1973-79 tenure granted in 1976). Associate member of the Graduate Faculty 1973-76; Senior member of the Graduate Faculty 1977-89.

1969-73 **Associate Professor** (tenured) and Director of the Motor Behavior Research Laboratory in the Sport Science Department, State University of New York, College at Brockport (1972-73). Member of the Graduate Faculty. Assistant Professor and Director of the Motor Behavior Research Laboratory in the Sport Science Department. Head varsity baseball coach and coordinator of Graduate Studies from 1971 to 1972, State University of New York, College at Brockport. 1967-69 Graduate Research Assistant in Exercise Physiology in the Human Performance Laboratory, College of HPER, University of Maryland. Instructor of Physical and Health Education, head varsity wrestling and golf coach, assistant baseball 1965-67 coach, State University of New York, Nassau Community College. 1963-65 Instructor of Physical and Health Education, head varsity basketball coach and assistant football and baseball coach, West Essex High School, Caldwell, NJ. 1962-63 Graduate Teaching Assistant in the basic instruction physical education program, assistant freshman baseball coach, University of Maryland. PROFESSIONAL EXPERIENCE AS A VISITING PROFESSOR/LECTURER/CONSULTANT 2002 Invited Lecturer, University of Cidade, Lisbon, Portugal 1998 Invited Lecturer and consultant, Aristotle University of Thessaloniki, Thessaloniki, Greece 1997 Invited Lecturer, Democritus University of Thrace, Komotini, Greece 1996 Invited Lecturer, Seoul National University and Sunchon University, South Korea. 1995 Invited Lecturer and consultant, University of Strathclyde, Glasgow, Scotland 1994 Invited Lecturer and consultant, University of Strathclyde, Glasgow, Scotland 1993 Invited Lecturer, University of Virginia, Charlottesville, VA. 1993 Invited Lecturer, University of South Carolina, Columbia, SC. 1992 Invited Lecturer, Auburn University, Auburn, AL. 1990 Invited Lecturer, Louisiana State University, Baton Rouge, LA. 1989 Invited Lecturer, University of Ulster, Belfast, Ireland 1988 Invited Lecturer, University of Florida, Gainesville, FL. 1987 Invited Lecturer, University of Virginia, Charlottesville, VA. 1987 Invited Lecturer, University of North Carolina, Chapel Hill, NC. 1987 Invited Lecturer, Oregon State University, Corvallis, OR. 1986 Invited Lecturer, University of Virginia, Charlottesville, VA.

Visiting Adjunct Professor, Arizona State University, Tempe, AZ.

1984

- 1983 Invited Lecturer, Wittenberg University, Springfield, OH.
- 1982 Invited Lecturer, University of California, Berkeley, CA.
- 1982 Invited Lecturer, University of Virginia, Charlottesville, VA.
- 1982 Invited Lecturer, Auburn University, Auburn, AL.
- 1979 Invited Lecturer, Louisiana State University, Baton Rouge, LA.
- 1979 Visiting Professor, University of Illinois, Champaign-Urbana, IL.
- 1977 Invited Lecturer, Temple University, Philadelphia, PA.
- 1977 Visiting Professor, The Christian-Albrechts University, Kiel, West Germany.
- 1977 Invited Lecturer, Catholic University, Leuven, Belgium
- 1974 Invited Lecturer, University of Wisconsin, Madison, WI.
- 1973 Visiting Professor, Dalhousie University, Nova Scotia, Canada
- 1972 Visiting Professor, Dalhousie University, Nova Scotia, Canada

TEACHING EXPERIENCE

A. Courses Taught from 1962-1973

Undergraduate Level

A variety of physical education, sport skill, and health education courses at the junior high school, high school, and university levels.

Introduction to Statistics, SUNY, Nassau Community College.

Physiology of Exercise Labs, University of Maryland.

Psychological Perspectives of Physical Education, SUNY, College at Brockport.

Psychology of Sport, SUNY, College at Brockport.

Motor Learning, SUNY, College at Brockport.

Graduate Level

Psychology of Sport, SUNY, College at Brockport.

Motor Learning, SUNY, College at Brockport.

Research Methods in Health, Physical Education and Recreation, Dalhousie University, Nova Scotia, Canada.

Statistics and Experimental Design in Health, Physical Education and Recreation, Dalhousie University, Nova Scotia, Canada.

B. Courses Taught at University of Illinois and West Germany (1977-1979)

Coaches Guide Teaching Sports Skills, University of Illinois

Psychology of Human Motor Performance, Christian-Albrechts University, Kiel, West Germany

Psychology of Sport, Christian-Albrechts University, Kiel, West Germany

C. Courses Taught at Penn State University (1973-1989)

Undergraduate Level

EXSCI 463 - Acquisition of Motor Skills

PH ED 5 - Racquetball

PH ED 203C - Leadership Practicum

PH ED 5 - Golf 1 and Golf 2

EXSCI 496 - Special Projects in Motor Learning and Motor Control

Graduate Level

EXSCI 563 - Motor Learning

EXSCI 565 - Neuromuscular Performance (Motor Control)

EXSCI 500 - Individual Studies and Research Projects in Motor Learning and Motor Control

BIO/PHYSIO 571 (team taught) - Animal Physiology

Eight lectures presented on the following:

"Motor Functions of the Spinal Cord and Cord Reflexes"

"Motor Functions of the Brain Stem and Basal Ganglia"

"Cortical and Cerebellar Control of Motor Functions"

"Autonomic Nervous System and the Hypothalamus"

D. Courses Taught at SUNY at Buffalo (1989-1992)

Undergraduate Level

ES 410 Motor Control and Learning

PT 371 Neurophysiology (team taught)

Five lectures presented on the "Central Nervous System Control of Movement"

Graduate Level

ES 516 Motor Learning and Movement Behavior

ES 519 Motor Control

E. Courses Taught at UNCG (1992-2001)

Graduate Level

ESS 648 Learning and Performance of Physical Skills

ESS 701 Neuropsychological Basis of Motor Control

F. Supervision of Graduate Students from 1973-2001

Served as the <u>major advisor</u> of 28 M.S. Theses and 10 Ph.D. Dissertations, and served as a <u>committee</u> <u>member</u> of 42 M. S. Theses and 22 Ph. D. Dissertations. An advisement total of 70 M.S Theses and 31 Ph. D. Dissertations.

Served as <u>major advisor</u> for the following 9 Ph. D. graduates: Drs. Tonya Toole, Greg Reid, Greg Anson, Mark Fischman, Max Vercruyssen, Debra Rose, Ben Sidaway, Nicole Damarjian, and Teri Dail.

Four former doctoral students for whom I was <u>major advisor</u> have been inducted into the American Academy of Kinesiology: Drs. Greg Anson, Mark Fischman, Greg Reid, and Debbie Rose.

Examples of notable MS graduate students of whom I was <u>major advisor</u> and who, after receiving their Ph. D. degree, went on to serve in the profession of Kinesiology or other fields in university positions include: Drs. William Merriman, Ken Holt, Jim Cauraugh, Andrew Gordon, Noreen Goggin, Amy Wolford, and Yuhua Li.

Examples of notable graduate students whose MS and/or Ph D. degree <u>committees on which I served</u> include Drs. Debra Feltz, Brad Hatfield, David Furst, Rick Hinrichs, Phil Martin, David Wright and Tom McKenzie

SCHOLARSHIP AND MASTERY OF SUBJECT MATTER

A. Scientific and Professional Presentations* (Total = 196; Invited = 180; Scientific = 99; Professional = 97)

* By Invitation

** AAHPER is now AAHPERD the American Alliance of Health, Physical Education, Recreation and Dance. NASPSPA is the North American Society for the Psychology of Sport and Physical Activity.

- Christina, R. W. Proprioception as Mediator in the Timing of Motor Responses. <u>National Convention of AAHPER</u>, Boston, MA (April 1969).**
- Christina, R. W. Movement-Produced Feedback and Timing. <u>Second Canadian Symposium of Psychomotor Learning and Sport Psychology</u>. Windsor, Ontario, Canada (October 1970).
- Christina, R. W. Reaction to Social Facilitation and Human Motor Performance. <u>Convention of the New York State AAHPER</u>. (January 1972).*
- Christina, R. W. Reaction to B. J. Cratty's paper on Motor Development and Integrating Abilities. <u>Adapted Physical Education Symposium</u>, SUNY College at Brockport, NY (April 1972).*
- Christina, R. W. Proprioception and Timing. <u>University of Illinois Motor Learning Seminar</u>. Champaign-Urbana, IL (May 1973).*
- Christina, R. W. Proprioceptive Feedback and Motor Learning: A Test of Adams' Closed-Loop Theory. <u>First Canadian Congress for the Multi-Disciplinary Study of Sport and Physical Activity</u>, Montreal, Quebec, Canada (October 1973).
- Christina, R.W. Timing and Motor Performance. <u>University of Wisconsin Motor Behavior Symposium</u>, Madison, WI (October 1974).*
- Christina, R. W. The Motor Learning of Children. National Convention of AAHPER, Atlantic City, NJ (March

- Christina, R. W. Learning the Direction and Extent of a Movement. <u>Annual Conference of NASPSPA</u> University of Texas, Austin, TX (May 1976).
- Christina, R. W. Single Versus Dual Memory States in Motor Learning. <u>Psychology Institute Seminar at the Christian Albrechts University</u>, Kiel, West Germany (March 1977).*
- Christina, R. W. Central and Peripheral Control of Movement. Sport Institute Seminar at the Catholic University, Leuven, Belgium (March 1977).*
- Christina, R. W. Inflow and Outflow in the Timing of Motor Responses. <u>Temple University Seminar on Motor Learning and Control</u>, Philadelphia, PA (April 1977).*
- Cauraugh, J., Christina, R. W. A Test of the Proprioceptive Input Hypothesis of Anticipatory Timing. <u>Annual Conference of NASPSPA.</u> Ithaca College, Ithaca, NY (May 1977).
- Holt, K., Christina, R. W. The Immediate Aftereffects of Overload on a Slow Self-Paced Positioning Movement and Associated Kinesthetic Figural Aftereffects. <u>Annual Conference of NASPSPA</u>, Ithaca College, Ithaca, NY (May 1977).
- Anson, J. G., Christina, R. W. The Role of Visual Feedback in Learning a Two-Dimensional Movement., Annual Conference of NASPSPA, Florida State University, Tallahassee, FL (May 1978).
- Christina, R. W. State of Research on the Motor Learning of Adults with Implications for Future Research.

 <u>Annual Conference of NCPEAM/NCPEAW</u>, Denver, CO (June 1978).*
- Christina, R. W. Reaction Time Analysis of Programmed Control of Short, Rapid Aiming Movements.

 <u>Louisiana State University Motor Control Symposium</u>, Baton Rouge, LA (March 1979).*
- Christina, R. W. Proprioceptive Feedback and the Temporal Anticipation of Discrete Motor Responses.

 <u>University of Quebec Motor Control Seminar</u>, Trois-Rivieres, Quebec, Canada (April 1979).*
- Christina, R. W. Learning and Teaching Sport Skills. <u>Sport Psychology Academy Pre-convention Symposium of the AAHPERD</u>, Detroit, MI (April 1980).*
- Christina, R. W. Three Aspects of Learning and Teaching Technique. <u>Sport Sciences Symposium of the U. S.</u> Ski Coaches Association, Bend, OR (April 1981).*
- Fischman, M. G., Christina, R. W. Simple Reaction Time as a Function of Response Complexity: Memory Drum Theory Revisited. <u>National Convention of AAHPERD</u>, MA (April 1981).*
- Christina, R. W. Learning, Feedback and Practice Applied to Coaching Field Hockey. <u>U. S. Olympic Training Center for the U. S. Field Hockey Assoc.</u>, Colorado Springs, CO (June 1981).*
- Christina, R. W. Making Changes in Diving Techniques. <u>Sports Sciences Symposium of the U. S. Diving Assoc.</u>, Snowbird, UT (September 1981).*
- Christina, R. W. Behavioral Aspects of the Memory and Motor Control Relationships. <u>Conference on Memory and Control in Motor Behavior</u>, Louisiana State University, Baton Rouge, LA (February 1981).*
- Christina, R. W. Reaction Time Analysis of Programmed Control of Movements. <u>Psychology Department</u> at Penn State University, University Park, PA (April 1981).*
- Christina, R. W. Current Research Trends in the Area of Motor Learning and Control. Seminar in Motor

- Learning and Control, Texas A & M University, College Station, Texas (April 1982).*
- Christina, R. W. The Effect of Response Complexity on Reaction Time. <u>Seminar on Motor Learning and Control</u>, University of California, Berkeley (April 1982).*
- Christina, R. W. Memory Drum Theory Revisited: Alternative Explanations for the Effect of Response Complexity on Reaction Time. Symposium presented with G. Anson, M. Fischman, M. Vercruyssen and A. Lambert at NASPSPA Conference, University of Maryland (May 1982).
- Christina, R. W. Changing an Athlete's Well-Learned Technique. <u>Sport Psychology Conference</u>, University of Virginia, Charlottesville, VA (June 1982).*
- Christina, R. W. Principles for Designing Effective Practice Conditions. <u>Sport Psychology Conference</u>, University of Virginia, Charlottesville, VA (June 1982).*
- Christina, R. W. How to Provide Feedback to Correct Errors in Technique. <u>Sport Psychology Conference</u>, University of Virginia, Charlottesville, VA (June 1982).*
- Christina, R. W. The Motor Learning of Children. <u>Seminar in Motor Behavior</u>, Auburn University, Auburn, Alabama (November 1982).*
- Christina, R. W. Problems in Measuring Motor Behavior. <u>Seminar in Motor Behavior</u>, Auburn University, Auburn, Alabama (November 1982).*
- Christina, R. W. Strength Training and Pistol Shooting Performance. Sports Medicine Symposium on Elite Shooter Training, Fort Benning, Georgia (February 1983).*
- Christina, R. W. Neuromotor Programming Time as a Function of Response Complexity. <u>Seminar in Motor</u> Behavior, Arizona State University, Tempe, Arizona (June 1983).*
- Christina, R. W. Motor Learning Research and Principles Applied to Coaching Rifle Shooting. <u>National Rifle Association Coaches Training Program</u>. U. S. Olympic Training Center, Lake Placid, New York (September 1983).*
- Vercruyssen, M., Christina, R. W. The Relationship between Strength and Pistol Shooting Performance.

 <u>Annual Meeting of the Canadian Association of Sport Sciences</u>. University of Waterloo, Ontario, Canada (November 1983).
- Christina, R. W. Response Elements Influencing the Time Needed to Prepare Rapid Voluntary Movements. Seminar in Motor Control, Arizona State University, Tempe, Arizona (January 1984).*
- Christina, R. W. Recent Trends in the Acquisition of Motor Skills. <u>Annual Conference of the Arizona Association of HPERD</u>, Carefree, Arizona (February 1984).*
- Christina, R. W. Toward an Integrated Approach in Sport Psychology and Motor Behavior. <u>The R. Tait McKenzie Symposium on Sport</u>, University of Tennessee (May 1984).*
- Christina, R. W. Changing an Athlete's Well-Learned Technique. <u>The Seventh Annual Sport Psychology</u> Conference, University of Virginia (June 1984).*
- Christina, R. W. Principles for Designing Effective Practice Conditions. <u>The Seventh Annual Sport Psychology</u> <u>Conference</u>, University of Virginia (June 1984).*

- Christina, R. W. Dealing with Performance Slumps. <u>The Seventh Annual Sport Psychology Conference</u>, University of Virginia (June 1984).*
- Rose, D., & Christina, R. W. Neuromotor Programming Time as a Function of Three Elements of Response Complexity. <u>Annual Conference of NASPSPA</u>, held in conjunction with <u>The Olympic Scientific Congress</u>, Eugene, OR (July 1984).*
- Christina, R. W. Thoughts on the Integration of Scientific Knowledge in Sport Psychology, Motor Development, and Motor Learning. Sports Science Seminar, University of Maryland (December 1985).*
- Christina, R. W. Motor Learning: Applied Aspects. <u>Gatorade Symposium on Future Directions in Exercise/Sport Research</u>, Arizona State University (January 1986).*
- Christina, R. W. Changing an Athlete's Well-Learned Technique. <u>Ninth Annual Sport Psychology Conference</u>, University of Virginia (June 1986).*
- Christina, R. W. Positive Approach to Correcting Errors. <u>Ninth Annual Sport Psychology Conference</u>, University of Virginia (June 1986).*
- Christina, R. W. The Functions of Feedback. <u>Ninth Annual Sport Psychology Conference</u>, University of Virginia (June 1986).*
- Christina, R. W. Motor Learning: Future Battlefronts of Research. <u>Annual Meeting of the American Academy of Physical Education</u>, Cincinnati, Ohio (April 1986).*
- Christina, R. W. Changing Well Learned Skills and Breaking Bad Habits. <u>National AAHPERD Convention</u>, sponsored by NASPE, Coaches Council and the Sport Psychology Academy, Cincinnati, Ohio (April 1986).*
- Christina, R. W. What Ever Happened to Applied Research in Motor Learning? <u>Annual Conference of NASPSPA</u>, Arizona State University (June 1986).*
- Christina, R. W. Teaching and Learning Sports Skills. <u>NRA Coaches Certification School</u>, U. S. Olympic Training Center in Colorado Springs, (April 1986).*
- Christina, R. W. Instructional Strategies for Teaching Wrestling Skills. <u>U. S. Wrestling Federation Coaches Certification School</u>, Penn State University, (June 1986).*
- Christina, R. W. Developing and Evaluating Your Communication Skills. <u>U. S. Equestrian Team Training</u> Center, Gladstone, NJ (July 1986).*
- Christina, R. W. How Feedback Operates in the Learning Skills. <u>U. S. Equestrian Team Training Center</u>, Gladstone, NJ (August 1986).*
- Christina, R. W. Learning, Control, and Enhancement of Motor Skills. <u>Health and Human Development</u> Research Expo, Penn State University (August 1986).*
- Johnson, L., Christina, R. and Leibowitz, H. The Role of Vision in Compensating for Vestibular After-Effects During Skilled Performance. <u>Annual Conference of NASPSPA</u>, Tempe, AZ (1986).
- Christina, R., Lambert, A. and Cross, H. An Instructional Feedback Device for Competitive Shooters. Shooting Research Seminar, East Germany (1986).*

- Christina, R. and Cross, H. Training Sub-elite Rifle Shooters with Auditory Feedback, <u>Shooting Research Seminar</u>, East Germany (1986).*
- Christina, R. W. Learning, Control, and Enhancement of Motor Skills. <u>First Health and Human Development Research Expo</u>, Penn State University (August 1986).*
- Christina, R. W. Application of Motor Skills Research and Learning Principles to Riding Performance. <u>Invited seminars conducted for the U. S. Equestrian team</u> at the U. S. Equestrian Training Center in Gladstone, New Jersey (August 1986) and at the Midwestern Equestrian Training Center in Chicago, Illinois (November 1986).*
- Christina, R. W. Whatever Happened to Motor Learning Research in Sport? The 1987 Carl S. Blyth Lecture in the Sports Sciences, University of North Carolina at Chapel Hill (March 1987).*
- Christina, R. W. Current Research Issues in Motor Learning. <u>Lecture</u>, University of North Carolina at Chapel Hill, (March 1987).*
- Christina, R. W. Motor Learning: Future Lines of Research. Lecture, Oregon State University (April 1987).*
- Christina, R. W. Basic and Applied Research in Physical Education. A General Framework with an Example from Motor Learning. <u>AAHPERD Research Consortium Symposium</u>, AAHPERD National Convention at Las Vegas, Nevada (April 1987).*
- Christina, R. W. Understanding Teaching Concepts: The Key to Success. <u>NRA National Instructors</u> <u>Conference</u>, Reno, Nevada (April 1987).*
- Christina, R. W. Teaching and Learning Sports Skills. <u>NRA Coaches Certification School</u>, U. S. Olympic Training Center in Colorado Springs (May 1987).*
- Christina, R. W. Changing an Athlete's Well-Learned Technique. <u>Tenth Annual Sport Psychology Conference</u>, University of Virginia (June 1987).*
- Christina, R. W. Positive Approach to Correcting Errors. <u>Tenth Annual Sport Psychology Conference</u>, University of Virginia (June, 1987).*
- Christina, R. W. Principles for Designing Effective Practice Conditions. <u>Tenth Annual Sport Psychology</u> Conference, University of Virginia (June 1987).*
- Christina, R. W. Refining and Maintaining Skills for Peak Performance. <u>U. S. Olympic Committee Elite</u> Coaches Conference, Dallas, Texas (September 1987).*
- Christina, R. W. Motor Learning Applications to Developing Rowing Skills. <u>U.S. Rowing Association National Conference</u>, Orlando, Florida (December 1987).*
- Christina, R. W. Movement Complexity and Neuromotor Programming Time. <u>Health and Human Development Conference</u>, Penn State University. (February 1988).*
- Christina, R. W. Motor Learning Applications to Teaching Motor Skills. <u>Eastern District Association</u> AAHPERD, Philadelphia, PA. (February 1988).*
- Christina, R. W. Motor Learning Theory: Implications for Teaching the Golf Swing. <u>Central Counties Chapter of the Philadelphia Professional Golfers Association Seminar</u>. Lebanon, PA (March 1988).*
- Christina, R.W. Feedback: Its Functions and Use in Teaching Sports Skills. National Wheelchair Athletic

- Association Coaches Education Clinic. Denver, Colorado (July 1988).*
- Christina, R. W. & Sidaway, B. A Visual and Auditory Feedback System to Improve Shooting Performance. <u>Eastern District Association of AAHPERD.</u> Philadelphia, PA. (February 1988).
- Christina, R.W. Critical Issues Confronting Motor Learning. Given as a part of a symposium entitled "Critical Issues Confronting the Discipline and Profession of Physical Education: An Interdisciplinary View." Sponsored by the Research Consortium of AAHPERD and presented at the National Convention in Kansas City, MO (April 1988).*
- Christina, R. W. Motor Learning Applications to Sport. Lecture given to an <u>Undergraduate Honors Class in Psychology 002</u> at Penn State University (January 1988).*
- Christina, R. W. Motor Learning and Control: An Introductory Overview. Lecture given to an <u>Undergraduate</u> <u>Class in EXSCI 175</u> at Penn State University (Fall and Spring Semesters 1985-88).*
- Christina, R. W. Motor Learning Principles Applied to the Shooting Sports. <u>NRA Coaches Certification School</u>. U. S. Olympic Training Center in Colorado Springs (October 1988).*
- Christina, R.W. The Sport Sciences During the 1990s. <u>Sport Science Seminar</u>, University of Virginia (September 1988). *
- Christina, R.W. The Teaching and Learning of Sport Skills. <u>Shooting Sports Seminar</u>, U.S. Olympic Training Center in Colorado Springs (October 1988).*
- Christina, R.W. Understanding the Process of Learning Sport Skills. <u>Sport Science Seminar</u>, sponsored by The Athletics Congress, Stanford University (March 1989).*
- Christina, R. W. Variables Influencing the Effectiveness of Practice. <u>Sport Science Seminar</u>, sponsored by The Athletics Congress, Stanford University (March 1989).*
- Christina, R.W. Feedback: Its Functions and Use in Teaching Skills. <u>Sports Science Seminar</u>, sponsored by The Athletics Congress, Stanford University (March 1989).*
- Christina, R.W. Analyzing Skills and Correcting Errors. <u>Sport Science Seminar</u>, sponsored by The Athletics Congress, Stanford University (March 1989).*
- Christina, R.W. Motor Learning and Control: An Introduction. <u>Lecture</u> given to an undergraduate class of about 30 students in EXSCI 175 at Penn State University (February 1989).*
- Christina, R. W. Motor Learning Principles Applied to Teaching Shooting Skills. <u>Shooting Sports Seminar</u>, U.S. Olympic Training Center in Colorado Springs (February 20, 1989).*
- Christina, R. W. Neuromotor Programming Time and Movement Complexity. <u>Sport Science Seminar</u>, Arizona State University (February 20, 1989).*
- Christina, R. W. The Learning, Control and Enhancement of Motor Skills. <u>Sport Science Seminar</u>, Penn State University (March 1989).*
- Christina, R.W. Analyzing Sport Skills and Correcting Errors: How is Your Approach? <u>Research Seminar</u>, California State HPERD Convention (March 1989).*
- Christina, R.W. What Motor Learning Tells Us About Correcting Bad Habits. Research Seminar, California

- State HPERD Convention (March 1989).*
- Christina, R. W. Issues in Pedagogical Biomechanics: A Motor Learning and Control Perspective. <u>National AAHPERD Convention</u> in Boston on April 21, 1989 for the Kinesiology Academy.*
- Christina, R. W. Motor Learning Theory: Implications for Teaching the Golf Swing. <u>Penn State University</u> <u>Golf Coaches Clinic</u> on June 23, 1989.*
- Christina, R. W. Motor Learning Principles Applied to the Coaching of Track and Field. <u>Sport Science Seminar</u>, sponsored by the Athletics Congress, Pittsburgh, PA (October, 1989).*
- Christina, R.W. Designing Effective Practice Conditions for the Learning of Track and Field Skills. <u>Sport Science Seminar</u>, sponsored by the Athletic Congress, Pittsburgh, PA (October 1989).*
- Christina, R. W. Motor Learning: The Key to Successful Teaching. <u>Annual Conference of the Sports Council of Northern Ireland</u>, Belfast, Ireland (November 1989).*
- Christina, R. W. Coaching Sport Skills: How is Your Approach? <u>Annual Conference of the Sports Council of Northern Ireland</u>, Belfast, Ireland (November 1989).*
- Christina, R. W. Grant Proposal Writing and the Initiation of Research Projects. <u>Seminar</u>, Penn State University (November 1989).*
- Christina, R.W. Sports Science: Past, Present, and Future. <u>Western New York Science Forum</u>, University at Buffalo (December, 1990).*
- Christina, R.W. Basic versus Applied Research: It All Depends on the Problem. <u>Keynote speaker/J.W. Kistler</u> Lecture, Department of Kinesiology, Louisiana State University (November 1990).*
- Christina, R.W. Recent Studies on the Role of Feedback in Learning to Control Movements in Sport. <u>Seminar</u>, Department of Kinesiology, Louisiana State University (November 1990).*
- Christina, R. W. Augmented Feedback and the Control of Complex Motor Skills. <u>Seminar</u>, Department of Physical Therapy and Exercise Science, University at Buffalo (December 1990).*
- Nicholson, M.E., Wang, M.Q., Airhihenbuwa, C., Mahoney B., Christina, R., & Maney, D. The effects of alcohol intoxication on motor performance impairment. <u>AAHPERD National Conference</u>. New Orleans, LA (April, 1990).
- Nicholson, M.E. Wang, M.Q., Airhihenbuwa, C., Mahoney, B., Christina, R., & Maney, D. Alcoholization: Implications for changes in law enforcement policy. <u>American Public Health Association Annual Conference</u>, New York, NY (October 1990)
- Christina, R.W. Analyzing Skills and Correcting Errors. <u>Seminar United States Organization for Disabled Athletes</u>. Tampa, Florida (January 1991).*
- Christina, R.W. Reaction Time Analysis of Programmed Control of Rapid Movements. <u>Seminar</u>, Department of Physiology, University at Buffalo (March 1991).*
- Christina, R.W. Unraveling the Mystery of the Complexity Effect in the Preparation of Skilled Movements. C.H. McCloy Lecture, AAHPERD Research Consortium Meeting, San Francisco, CA (April 1991).
- Christina, R.W. Neuromotor Programming Time and Movement Constraint. <u>Seminar</u>, <u>Southern Ontario</u> <u>Psychomotor Behavior Meeting</u>, McMaster University, Hamilton-Ontario, Canada (April 1991).*
- Li Y., Christina, R. W., & Wright, D. L. Role of Proprioceptive Feedback in Perceptual Anticipatory Timing

- Annual NASPSPA Conference, Asilomar, California (June 1991).
- Christina, R. W. The Role of the Coach in Providing a Positive Learning Experience for the Youth Sport Participant. Symposium on organized sport for youth. Oregon State University (June 1991).*
- Christina, R.W. Feedback: Its Functions and Use in Teaching and Learning Motor Skills. <u>New York State</u> <u>Coaches Certification Program</u>. Amherst, NY (January 1992).*
- Christina, R.W. Variables Influencing the Effectiveness of Practice. <u>New York State Coaches Certification</u>

 <u>Program.</u> Amherst, NY (January 1992).* <u>Coaches Certification Program.</u> Amherst, NY (January 1992).*
- Christina, R.W. Practicing for Peak Performance. <u>United States Organization for Disabled Athletes</u>. Tampa, Florida (February 1992).*
- Christina, R.W. Designing Conditions to Optimize Learning. <u>Golf Advantage School Teaching Summit for North Carolina PGA</u>. Pinehurst, NC (February, 1992).*
- Christina, R.W. Optimizing Training Conditions for Long-Term Retention and Transfer of Knowledge and Skills. <u>U.S. Army Research Institute TRADOC</u>, Fort Monroe, VA (April, 1992).*
- Christina, R.W. Techniques and Strategies for Enhancing Human Motor Skill Learning and Performance.

 <u>Auburn University Special Lectures Program</u>. Auburn, AL (May 1992).*
- Christina, R.W. Optimizing Long-Term Retention and Transfer of Motor Skills. <u>Auburn University Special Lectures Program</u>. Auburn, AL (May 1992).*
- Christina, R.W. Practice: New Concepts and Developments. <u>Auburn University Special Lectures Program</u>. Auburn, AL (May 1992).*
- Christina, R.W. Coaching Young Athletes. <u>Auburn University Special Lectures Program</u>. Auburn, AL (May 1992).*
- Christina, R.W. Using Feedback to Enhance Sport Performance. <u>Sixteenth Annual Sport Psychology</u> <u>Conference</u>. University of Virginia (June 1993).*
- Christina, R.W. Rethinking Faculty Roles and Rewards for the New Century: Dean's Perspective <u>Recreation</u> <u>Chairs and Heads Conference</u>. Southern Pines, NC (March, 1993). *
- Christina, R.W. Practicing for Peak Performance. <u>Sixteenth Annual Sport Psychology Conference</u>. University of Virginia (June 1993).*
- Christina, R.W. Sport Performance and Self Esteem: A Balancing Act. <u>Sixteenth Annual Sport Psychology</u> <u>Conference</u>. University of Virginia (June, 1993).*
- Christina, R.W. Measurement Problems in Applied Motor Learning Research. <u>Graduate Seminar</u>. University of Virginia (June, 1993).*
- Christina, R.W. The Use of Reaction Time to Assess the Time Needed to Program Rapid Movements. <u>Graduate Seminar</u>. Department of Exercise Science, University of South Carolina (November, 1993).*
- Christina, R.W. Administration in Higher Education: An Academic Dean's Perspective. <u>Lecture in Educational Leadership and Cultural Foundations (ELC601)</u>. UNC Greensboro (April, 1994).*
- Christina, R.W. The Future of Physical Education in Higher Education: Survival or Extinction. AAHPERD

- National Convention. Denver, Colorado (April, 1994).*
- Christina, R.W. Alternative Perspectives to Scholarship Reconsidered (Panel Discussant). <u>NAPEHE National Conference</u>. Palm Springs, CA (January, 1995).*
- Christina, R.W. The Role of a Academic Dean in the Administration of Higher Education. <u>Lecture in Educational Leadership and Cultural Foundations (ELC601)</u>. UNC Greensboro (April, 1995).*
- Olescyski, K. & Christina, R.W. Programming Time as a Function of the Index of Movement Difficulty.

 <u>Annual NASPSPA Conference</u>. Asilomar, CA (June, 1995).
- He, C., Etnier, J., Landers, D. & Christina, R. The Response Complexity Effect in Skilled Movements: An Event-Related Potential Analysis. <u>Annual NASPSPA Conference</u>. Asilomar, CA (June, 1995).
- Christina, R.W. Getting it From the Practice Range to the Golf Course. <u>Ellen Griffin Seminar</u>. UNC Greensboro (September, 1995).*
- Christina, R.W. Optimizing Practice Conditions for Learning Golf Skills. <u>Pinehurst Golf Advantage School</u>. Pinehurst, NC (November, 1995).*
- Christina, R.W. Motor Learning Theory: Applications for Teaching Golf Skills. <u>Pinehurst Teaching Summit.</u> Pinehurst, NC (January, 1996).*
- Christina, R.W. Principles for Designing Effective Practices. <u>Youth Sport Workshop for NASPE-AAHPERD</u>. Atlanta, Georgia (April, 1996).*
- Christina, R.W. Human Performance Determinants in Sport: A Motor Learning Perspective. <u>The 96 Seoul</u> International Sport Science Congress. Seoul, Korea (June, 1996).*
- Christina, R.W. Levels of Relevance of Motor Learning Research for Finding Solutions to Practical Problems. Korean Alliance of Health, Physical Education, Recreation and Dance. Seoul, Korea (June, 1996).*
- Christina, R.W. New Curricular Trends in Exercise and Sport Science. <u>Sunchon University</u>, South Korea (June 1996).*
- Christina, R.W. Optimizing Long-Term Retention and Transfer of Motor Skills. <u>Seminar at Seoul National University</u>. Seoul, Korea (June, 1996).*
- Christina, R.W. Concerns and Issues in Studying and Assessing Motor Learning. 8th Measurement and Evaluation Symposium. Corvallis, Oregon (October, 1996).*
- Christina, R.W. Optimizing the Learning of Motor Skills. <u>Fifth International Congress on Physical Education and Sport</u>. Komotini, Greece (May, 1997).*
- Christina, R.W. Problems in Assessing Motor Learning. <u>Fifth International Congress on Physical Education and Sport</u>. Komotini, Greece (May, 1997).*
- Christina, R.W. Optimizing the Learning of Golf Skills. <u>1998 Pinehurst Teaching Summit</u>. Pinehurst, North Carolina (January, 1998).*
- Christina, R.W. Optimizing Skill Learning. <u>Western Section of the LPGA</u>, Arizona State University, Tempe, Arizona (March 1999).*
- Christina, R.W. Prinicples of Training for Optimizing Sport Performance. Aristotle University, Thessaloniki,

- Greece (May 1999).*
- Christina, R.W. Advancing Engagement in Kinesiology and Physical Education. <u>The Twentieth Dudley Allen Sargent Lecture-NAPEHE Conference</u>. Austin, Texas (January 2000).*
- Christina, R.W. Response to Multiple Dimensions of Expertise in Teaching. <u>NAPEHE Conference</u>. Austin, Texas (January 2000).*
- Christina, R.W. Research and Development Technology in Teaching. <u>2000 PGA Teaching & Coaching Summit.</u> New Orleans, Louisiana (December 2000).*
- Christina, R.W. Implications from Research for Teaching and Learning Golf Skills. <u>Education Division of the PGA of America</u>. PGA Learning Center. Port St. Lucie, Florida (February 2001).*
- Christina, R.W. Practice in Golf. <u>The Future of Golfers Conference</u>. <u>The World Scientific Congress of Golf Trust and Arizona State University Golf Research, Education and Training</u>. (March 2001).*
- Christina, R.W. Enhancing Human Performance: Invited Symposium. <u>Western Psychological Association 81st</u> Annual Convention, Maui, Hawaii (May 2001).*
- Christina, R.W. Teaching and Learning Golf Skills. <u>Seminar hosted by the PGA of Scotland. Drumoig, Scotland (June 2001)</u>
- Christina, R.W. Analyzing Golf Skills and Correcting Errors. <u>Education Department of the PGA of America</u>. PGA Learning Center. Port St. Lucie, Florida (February 2002).*
- Christina, R.W. Why Does Traditional Training Fail to Optimize Playing Performance? World Scientific Congress of Golf. St. Andrews, Scotland (July 2002).*
- Christina, R.W. Analyzing Skills and Correcting Errors. <u>International Seminar on Youth Sports</u>. Lisbon, Portugal (November 2002).*
- Christina, R.W. Making Complex Skills Easier to Learn. <u>International Seminar on Youth Sports</u>. Lisbon, Portugal (November 2002).*
- Christina, R.W. Analyzing Golf Skills and Correcting Errors. <u>Royal Canadian Golf Association</u>. PGA Learning Center. Port St. Lucie, Florida (November 2002).*
- Christina, R. W. Transfer Training in Golf. <u>Royal Canadian Golf Association</u>. PGA Learning Center. Port St. Lucie, Florida (November 2002).*
- Christina, R.W. Enhancing Golf Learning and Performance. <u>Education Department of the PGA of America</u>. PGA Learning Center. Port St. Lucie, Florida (February 2003).*
- Christina, R. W. Teaching and Learning Issues. <u>Golf Magazine Top 100 Teachers Retreat</u>. Pinehurst, North Carolina (March 2003).*
- Christina, R. W. Quality Practice for Quality Play. <u>Swedish Golf Federation</u>. West Palm Beach, Florida (January 2004).*
- Christina, R. W. Optimizing Learning & Performance Conditions. <u>Golf Magazine Top 100 Teachers Retreat</u>. Pinehurst, North Carolina (March 2005).*
- Christina R. W. The Pinehurst Studies. Golf Magazine Top 100 Teachers Retreat. Pinehurst, North Carolina

- (March 2005).*
- Christina, R. W. Teaching and Learning Golf Skills. <u>Dana Rader Golf School</u>. Charlotte, North Carolina (July 2005).*
- Christina, R. W. How effective is your teaching style for optimizing learning golf skills? <u>Teaching, Learning, Playing Golf Workshop.</u> Pine Needles/Mid Pines, Southern Pines, North Carolina (November 2005).*
- Christina, R. W. How effective do you structure practice conditions for learning? <u>Teaching, Learning, Playing Golf Workshop</u>. Pine Needles/Mid Pines, Southern Pines, North Carolina (November 2005).*
- Christina, R. W. Fostering Leadership: Implications for NAKPEHE. Keynote Address. <u>NAKPEHE Conference</u>. San Diego, California (January 2006).*
- Christina, R. W. Adjusting teaching styles to learning styles. <u>Golf Teaching Seminar</u>. Pinehurst Resort and Country Club, Pinehurst, North Carolina (January 2006).*
- Christina, R. W. Science in golf. <u>American Committee for the Wiezmann Institute of Science</u>. Bedminster, NJ (May 2006).*
- Christina, R. W. Optimizing conditions for learning golf skills. <u>Precision Golf School</u>. Greensboro, NC (January 2007).*
- Christina, R. W. Teaching and learning golf skills. Pinehurst Golf Academy. Pinehurst, NC (February 2007).*
- Christina, R. W. How to make swing changes stick. Golf Magazine's Top 100 Teachers Retreat. Pinehust, NC (March 2007)*
- Christina, R. W. Recent Research Findings on the Teaching and Learning of Golf Skills. <u>LPGA teaching</u> seminar. Greensboro, NC. (September 2007).*
- Christina, R. W. & Alpenfels, E. The Way You Practice Can Affect the Transfer of Driving Performance. <u>MIT Better Golf Through Technology Conference</u>. MIT: Boston, Mass. (February 2008).*
- Christina, R. W. & Alpenfels, E. Growing the Game: A Survey Report. World Scientific Congress of Golf V. <u>Tempe, AZ. (March 2008).*</u>
- Christina, R. W. & Alpenfels, E. Transfer of Driving Performance as a Function of Two Practice Methods. World Scientific Congress of Golf V. Tempe, AZ (March 2008).*
- Christina, R. W. (2009). Golf Skill Learning as a Function of Augmented Feedback Schedules. Golf Magazine's Top 100 Teachers Retreat. Pinehurst, NC (March 2008).*
- Christina, R. W. (2010). The Neural Basis of Motor Learning With Implications for Teaching. <u>Golf Magazine's Top 100 Teachers Retreat</u>. Pinehurst, NC (March 2010).*
- Christina, R. W. (2010). How to Practice Effectively Using Drills and Training Aids. <u>PGA of America Education Conference</u>. Orlando, FL (2010).*
- Christina, R. W. (2011). Optimizing the Learning, Retention and Transfer of Golf Skills. <u>Golf Magazine's Top</u> 100 Teachers Retreat. Orlando, FL (November 2011).*
- Christina, R. W. & Bjork, R. A. (2011). Optimum Practice Structures for Golf Skills Learning, Retention and

- Transfer. Golf Magazine's Top 100 Teachers Retreat. Orlando, FL (November 2011).*
- Christina, R. W. (2011). The Psychology of Competitive Golf. <u>Precision Golf School Seminar</u>. Greensboro, NC (December 2011).*
- Christina, R. W. (2012). Skills and Transfer Practice. <u>Teaching and Coaching Seminar</u>. Port St. Lucie, FL (January 2012).*
- Christina, R. W. (2012). Understanding Golf Skill Learning. <u>PGA of America Education Conference</u>. Orlando, FL (January 2012).*
- Christina, R. W. (2012). Structuring Practice Conditions to Optimize Golf Skill Learning. <u>PGA of America Education Conference</u>. Orlando, FL (January 2012).*
- Christina, R. W., Alpenfels, E., Mitchum, K. (2012). Reading Putts as a Function of Viewing Position, and Amount and Direction of Break. <u>World Scientific Congress of Golf VI</u>. Phoenix, AZ (March 2012).*
- Christina, R. W. & Alpenfels, E. (2012). Learning Swing Changes as a Function of Internal and External Focus of Attention Cues. World Scientific Congress of Golf VI. Phoenix, AZ (March 2012).*
- Christina, R. W. (2012). Variant and Invariant Aspects of Motor Programs that Control Golf Swings. World Scientific Congress of Golf VI. Phoenix, AZ (March 2012).*
- Christina, R. W. & Alpenfels, E. (2016). The Pinehurst Studies: Findings that Defy Conventional Wisdom. World Scientific Congress of Golf VIII. St. Andrews University, Scotland (July 2016).*
- Christina, R. W. & Alpenfels, E. (2016). Aim Small, Miss Small: To What Extent Does It Work? World Scientific Congress of Golf VIII. St. Andrews University, Scotland (July 2016).*
- Carson, H., Collins, D., & Christina, R. (2016). Technique Change in Experienced Golfers: Coaching Considerations for Maximizing Long-Term Permanence and Pressure Resistance. World Scientific Congress of Golf VIII. St. Andrews University, Scotland (July 2016).*
- Christina, R. W. & Alpenfels, E. (2017). New Research Findings on Golf Shot Performance as a Function of Distant and Intermediate Targets. <u>PGA of America Education Conference</u>. Orlando, FL (January 2017).*

B. Consulting and Service

1. Consulting for Sport Organizations

Consulting and clinics provided on the learning and teaching of sport skills as a part of the coaches' educational training and certification programs for the following sport organizations and National Governing Bodies of the U.S. Olympic Committee:

- 1976-81 United States Wrestling Federation, Stillwater, OK
- 1979 Little League Baseball, Tucson, AZ
- 1979-80 N. Y. State Sports Authority, Bohemia, NY
- 1980 Recreation Department, Hutchinson, KS
- 1981 Youth Sports Institute, University of Michigan, East Lansing, MI

- 1981-90 U.S. Olympic Committee Sports Medicine Council
- 1981 U. S. Field Hockey Association, Colorado Springs, CO
- 1981 U. S. Ski Coaches Association, Park City, UT
- 1981 U. S. Diving Coaches Association, Indianapolis, IN
- 1979-87 U. S. Shooting Team, Colorado Springs, CO
- 1979-88 National Rifle Association, Washington, D.C.
- 1986 USA Wrestling, Stillwater, OK
- 1986 U. S. Equestrian Team, Gladstone, NJ
- 1987 U. S. Olympic Men's Rowing Committee
- 1988 Professional Golfers Association, Philadelphia, PA
- 1988 National Wheelchair Athletic Association
- 1988 U. S. Diving Association
- 1989-91 The Athletics Congress
- 1990-92 United States Organization for Disabled Athletes
- 1992- Pinehurst Golf Academy, Pinehurst, NC
- 2000- PGA of America Education Department
- 2000- LPGA Teaching Division
- 2003- Golf Magazine
- 2002-03 Royal Canadian Golf Association—PGA of Canada
- 2004 Swedish Golf Federation
- 2005- Dana Rader Golf School, Charlotte, NC
- 2006- Precision Golf School

2. Consulting for Commercial Organizations:

1975-77 Acushnet (Titleist) Golf Company, New Bedford, MA

Consulted on the teaching and learning of the golf swing. Their main interest in my expertise was that they thought it could contribute further to their understanding of how they could improve their golf clubs.

1977 Houghton Mifflin Publishing Company, Boston, MA

Consulting responsibilities included reviewing, evaluating and preparing a written report on a prospectus and detailed table of contents being proposed as a basic undergraduate text in Motor Learning. Essentially the company wanted my critique of the material and also my opinion as to whether this book proposal was worth publishing.

1978 Lea & Febiger Publishing Company, Philadelphia, PA

Consulting responsibilities included reviewing, evaluating and preparing a written report on a prospectus and detailed table of contents which was being proposed as a basic undergraduate text in Motor Learning. Essentially the company wanted my critique of the material and also my opinion as to whether this book proposal was worth publishing.

1978-79 MacMillian Publishing Company, Inc., New York, NY

Consulting responsibilities included reviewing, evaluating and preparing a written report of the revised manuscript of the textbook entitled "Motor Learning and Human Performance," pp. 550, authored by: Robert N. Singer. This text is in its third edition and is and is mainly an upper level undergraduate text.

1978-79 Wm. C. Brown Company Publishers, Dubuque, IA

Consulting responsibilities included reviewing, evaluating and preparing a written report of the manuscript of the textbook entitled "Motor Learning: Concepts and Applications," pp. 342, authored by Richard Magill. This book is a basic undergraduate text in Motor Learning.

1980-81 MacMillan Publishing Company, Inc., New York, NY

Consulting responsibilities included reviewing, evaluating and preparing a written report of a manuscript of the textbook entitled "The Learning of Motor Skills" authored by Robert N. Singer. This text is in its first edition and is an undergraduate text.

1980-81 Wm. C. Brown Company Publishers, Dubuque, IA

Consulting responsibilities included reviewing, evaluating and preparing a written report of the textbook entitled "Introduction to Motor Behavior: A Neuropsychological Approach," (Second Edition) pp. 610, authored by George H. Sage. This text is mainly an upper undergraduate text.

1982-83 Wm C. Brown Company Publishers, Dubuque, IA

Consulting responsibilities included reviewing, evaluating and preparing a written report of the textbook entitled, 'Motor Learning and Control: A Neuropsychologial Approach," (Third Edition) Authored by George H. Sage. This text is mainly an upper level undergraduate text.

1983-84 Wm. C. Brown Company Publishers, Dubuque, IA

Consulting responsibilities included reviewing, evaluating and preparing a written report of the textbook entitled "Motor Learning: Concepts and Applications" (Second Edition) pp. 451, authored by Richard Magill. This book is a basic undergraduate text in Motor Learning and Control.

1984-96 Human Kinetics Publishers, Champaign, IL

Consulting responsibilities included reviewing, evaluating and preparing written reports on a number of books and proposals for books.

1989-92 Laser Track Golf Company, Inc., New Jersey

Consulting included the application of motor learning principles to acquiring and refining the golf swing, and assisting in the development of teaching centers.

1991-94 Mayfield Publishing Company, Mountain View, California

Consulting responsibilities included reviewing, evaluating and preparing a written report of books and proposals for books.

1992-94 Wilson Sporting Goods Company-Golf Division, Chicago, IL

Consulting responsibilities included research and development of golf training/teaching aids.

2001- Pinehurst Golf Academy, Pinehurst, North Carolina

Consulting responsibilities include directing their golf research program on teaching and Learning---and teaching in their golf schools.

2001-06 Frankly Golf Consulting LLC. Champions Gate, Florida

Consulting responsibilities include applying (and conducting research) on human motor performance to golf learning and performance.

2001- Golf Magazine, New York City

Consulting responsibilities include advising and conducting golf research for publication.

2005 Dana Rader Golf School

Consulting responsibilities include evaluating their Golf School in terms of the teaching and learning process.

2007- Precision Golf School, Greensboro, NC Consulting responsibilities include teaching golf and serving as mental game consultant.

2008- Eaton—Golf Pride Inc., Pinehurst, NC Consulting involved conducting research on the effects of various golf grips on swing and shot Performance.

2008- Hillrich & Bradsby---Bionic Golf Glove, Louisville, KY
Consulting involved conducting research on the effects of Bionic Gloves on golf swing and shot performance.

3. Consulting for Government Agencies:

1979-82 Department of Health, Education and Welfare

Consultant on a three-year grant that was awarded to Dr. Joseph Winnick at the State University of New York, College at Brockport. The research proposal is entitled "Physical Fitness and the Orthopedic and Sensory Impaired."

The grant was awarded through the Handicapped Research and Demonstration Program of the Department of Health, Education and Welfare, The United States Office of Education. The main

consulting responsibilities include evaluating the proposed research design, measurement techniques, data collection, data analysis, results and interpretation of results.

1989-92 U.S. Army Research Institute

Consultant on training techniques to enhance learning, retention, and transfer of motor skills.

1990-92 National Research Council, National Academy of Sciences

Served as a member of a 12 person committee that studied techniques for the enhancement of human performance. This committee served under the Commission on Behavioral and Social Sciences and Education.

4. Consulting for Legal Firms:

- 1985 Consultant and expert witness in motor learning/control and motor skill instructional practices for Associates and Bruce L. Scheiner, Personal Injury Lawyers, Scheiner Building, Corner of Winkler & Evans Avenue, P. O. Box 06048, Fort Myers, Florida 33906, (813) 939-2900. The litigation involved a high school wrestling injury.
- 1986 Consultant and expert witness in motor learning/control and motor skill instructional practices for Burgess, Kennedy, Fitzer & Strombom, P.S., A Helens Avenue, Tacoma, Washington. The litigation involved a high-school wrestling injury.
- 1988 Consultant and expert witness in motor learning/control and motor skills instructional practices for John Marshall, Counselor at Law, 980 Old Country Road, Plainview, N.Y. 11803, (516) 935-3770. The litigation involved a National Survival Game injury.

5. Service to Professional Associations and Scholarly Journals:

- 1976-82 Ad hoc reviewer in the area of motor learning for the <u>Journal of Experimental Child Psychology</u>.
- 1977-79 Associate Editor of the Research Quarterly in the area of motor learning.
- 1972-01 **Regular reviewer** of research articles in the area of Motor Control and learning for the <u>Research</u> Quarterly for Exercise and Sport.
- 1978 **Associate Editor** in the area of motor learning for the Proceedings of NASPSPA.
- 1978-80 **Section Editor** in the area of motor learning for the <u>Research Quarterly</u>.
- 1979 **Associate Editor** in the area of motor learning and motor control for the <u>Proceedings of NASPSPA</u>.
- 1979 **Reviewer** of research papers in the area of motor learning and motor control that were submitted to be presented at the Research Consortium of the 1980 National Convention of AAHPERD, Detroit, MI.
- 1980 **Reviewer** of research papers in the area of motor learning and motor control that were submitted to be presented at the Research Consortium of the <u>1981 National Convention of AAHPERD</u>, Boston, MA.
- 1980-83 **Section Editor** in the area of Motor Control (Behavioral) for the <u>Research Quarterly for Exercise and</u>

- Sport.
- 1981-89 Consulting Editor and reviewer for the <u>Journal of Motor Behavior</u>.
- 1981-85 **Member of the Editorial Board** of the <u>Journal of Sport Psychology</u>.
- 1981 **Reviewer** of research papers in the area of motor learning and motor control that were submitted to be presented at the Research Consortium of the <u>1982 National Convention AAHPERD</u>, Houston, TX.
- 1981-83 **Ad hoc reviewer** in the area of motor learning of children for the <u>Journal of Developmental Psychology</u>.
- 1982-84 **Member** (1982-83) and **Chair** (1983-84) of the **Outstanding Research Award Committee** of the <u>Research Consortium of AAHPERD</u> which selects the articles published in the <u>Research Quarterly for</u> Exercise and Sport that are outstanding contributions and scholarship.
- 1983-89 **Member** of the Committee on Education and Training of the <u>National Rifle Association</u>.
- 1983-88 Member of the U.S. Shooting Sports Research Council.
- Reviewer of research abstracts in the area of motor learning and control that were submitted to be presented at the Research Consortium of the 1985 National Convention of AAHPERD, Atlanta, GA.
- 1985 **Reviewer** of research abstracts in the area of motor control that were submitted to be presented at the Annual Meeting of the American College of Sports Medicine, Nashville, TN.
- 1985-86 Ad hoc reviewer for the International Journal of Sport Biomechanics.
- 1984-89 **Member** of the Distinguished Scholar Award Committee of NASPSPA which selects an individual who has made long-term contributions to research and scholarship or who is still in the early stages of his/her career but has made significant contributions.
- 1986-88 **Member** of the Membership Committee of the <u>American Academy of Physical Education</u>.
- 1980-01 Ad hoc reviewer for the journal Medicine and Science in Sports and Exercise.
- 1987 **Reviewer** of a grant proposal in the Memory and Cognitive Processes Program of the <u>National Science</u> Foundation.
- 1987-91 Member of the Editorial Board for the Research Quarterly for Exercise and Sport.
- 1988-89 Chair of the Membership Committee of the American Academy of Physical Education.
- 1988-01 Ad hoc reviewer for the journal Quest.
- 1988-01 Ad hoc reviewer for the journal Adapted Physical Activity Quarterly.
- 1988-01 Ad hoc reviewer for the journal Perceptual and Motor Skills.
- 1988-01 Ad hoc reviewer for the journal The Sport Psychologist.
- 1988-01 Ad hoc reviewer for the journal Psychological Bulletin.

- 1988-01 Ad hoc reviewer for the journal Psychological Review.
- 1989-01 Ad hoc reviewer for the Journal of Experimental Psychology: Human Perception and Performance.
- 1988-01 Ad hoc reviewer for the journal Human Performance.
- 1988-89 **Member** of the <u>American Psychological Association</u> Committee to evaluate applicants for Fellow Status to Division 47 Exercise and Sport Psychology.
- 1988-89 **Member** of the <u>Past-President's Council of NASPSPA</u> which evaluated the current purposes, functions and structures of the Society and recommended changes for the future.
- 1989-90 Member of the Fellow Selection Committee of the American Academy of Physical Education.
- 1989-91 **Member** of a 12-person committee on the Techniques for the Enhancement of Human Performance of the National Research Council of the National Academy of Sciences.
- 1989-90 **Member** of the organizing committee for the Motor Control/Learning program of the <u>Annual NASPSPA Conference</u>, University of Houston, Texas.
- 1990-93 **Member of the Editorial Board** for the Journal <u>Human Performance</u>.
- 1990-91 **Chair** of the Dissertation Award Committee for the Exercise and Sport Psychology Division (47) of the American Psychological Association.
- 1991-92 **Member** of the Executive Committee of the College & University Physical Education Council of the National Association for Sport & Physical Education.
- 1990-93 **Member** of the Executive Committee of the <u>American Academy of Physical Education</u>.
- 1991-92 **Member** of the Travel Award Committee of the American Psychological Association.
- 1991-92 **Chair** of the Committee to select the 1992 C.H. McCloy Research Lecturer, sponsored by the <u>Research Consortium of AAHPERD</u>.
- 1991-92 **Co-Chair** of the Committee to select the 1992 Ray Weiss Research Lecturer, co-sponsored by the <u>American Academy of Physical Education</u> and <u>Research Consortium of AAHPERD</u>.
- 1992-93 **Member** of the <u>American Psychological Association</u> committee to evaluate applicants for Fellow Status to Division 47 Exercise and Sport Psychology.
- 1992-93 **Member** of the Committee to select the Early Career Distinguished Scholar Award of NASPSPA.
- 1993-94 **Chair** of the Documents and Governance Committee of the <u>American Academy of Kinesiology and Physical Education</u> (AAKPE).
- 1994-95 **Member** of the new fellow nominations committee of AAKPE.
- 1994-95 **Member** of the nomination/elections committee of AAKPE.
- 1994-95 **Member** of the Future Directions committee of the National Association for Physical Education in Higher Education (NAPEHE).

- 1995-96 **Member** of the Executive Committee of NAPEHE.
- 1998-00 **Member** of the nomination /elections committee of AAKPE.
- 1998-00 **Member** of the elections committee of NAPEHE.
- 2001 Educational and Research Consultant to Golf Magazine on learning and performance
- 2000 Consultant to the LPGA on motor learning
- 2003 **Member** of the Awards committee of NAKPEHE
- 2003 Consultant to Precision Golf School on teaching and learning
- 2008 Educational and Research Consultant to Golf Magazine's Top 100 Teachers
- 2009 Educational and Research Consultant to the PGA of America on learning and teaching
- 2011 Member of the Steering Committee of the World Scientific Congress of Golf

C. Honors and Awards

- 1960-62 Lettered in three years of varsity baseball at Ithaca College. **Co-captain** of the 1962 baseball team that won the NCAA District 2 Championship and went on to play in the College World Series in Omaha, Nebraska.
- 1962 Graduated **Cum Laude** with a B. S. degree.
- 1972 Coach of the Year of collegiate baseball in the State University of New York Athletic Conference.
- 1972 **Fellow** of the Research Consortium of AAHPERD.
- 1979 **Men of Achievement** (Sixth Edition) published by the International Biographical Centre of Cambridge, England.
- NATO Scholar--Invited as one of seventy-two (72) scholars from the NATO countries to participate in The NATO_Advanced Study Institute on Motor Learning and Control. Abbaye de Senanque, France.
- 1979-80 **President** of the North American Society for Psychology of Sport and Physical Activity.
- 1982 University Distinguished Lecturer. Department of HPER, Auburn University.
- 1983 **Fellow** of the Experimental Psychology Division of the American Psychological Association.
- 1984 **Fellow** in the American Academy of Physical Education.
- 1986 1985-86 Outstanding Research Award with coauthor D. Rose from the Research Consortium of the American Alliance of Health, Physical Education, Recreation and Dance for the publication entitled "Premotor and motor reaction time as a function of response complexity." This article appeared in the Research Quarterly for Exercise and Sport. The award is presented for research that is judged to be an outstanding contribution to scholarship and is likely to significantly affect theory and/or practice.

1986	Distinguished Service Award from the Dean of the College of HPER in recognition of outstanding service to the College at Penn State University.
1987	Annual Carl S. Blyth Lecturer in the sport sciences at the University of North Carolina at Chapel Hill.
1988	Fellow and Charter Member of Exercise and Sport Psychology Division (47) of the American Psychological Association.
1991-92	President of the American Academy of Physical Education.
1990	Annual J.W. Kistler Research Lecturer, Department of Kinesiology, Louisiana State University.
1990	National Research Council Committee Member Selected to serve as one of 12 members on a National Research Council Committee of the National Academy of Sciences.
1991	C.H. McCloy Research Lecturer, Research Consortium of AAHPERD.
1992	Meritorious Service Award for serving on the Editorial Board of the <u>Research Quarterly for Exercise</u> and <u>Sport</u> from 1987-1991.
1992	University Distinguished Lecturer, Department of Health and Human Performance, Auburn University.
1995-96	Vice-President of NAPEHE.
2000	Dudley Allen Sargent Lecturer, NAPEHE.
2002	Distinguished Service Award from the School of Health and Human Performance at UNCG
2003	Hetherington Award from the American Academy of Kinesiology and Physical Education (AAKPE): The highest award given by the Academy.
2006	Distinguished Scholar Award from the National Association for Kinesiology and Physical Education in Higher Education (NAKPEHE).
2006	Cover story in <u>Golf Magazine</u> titled <i>A New Way To Putt</i> (which I coauthored) won the 2006 National Magazine Award by the American Society of Magazine Editors. It was the first such award ever given to any golf magazine.
2007	NASPE Hall of Fame Award.
2007	Lifetime Achievement Award from Ithaca College.
2007	Athletic Hall of Fame Award from Ithaca College.
2008	Golf Magazine's Innovator of the Year for his cutting edge research on golf skill learning.
2008	Distinguished Administrator Award (NAKPEHE)
2008	Outstanding Research Article at the 2008 World Scientific Congress of Golf. The award was sponsored by Golf Digest and the World Scientific Congress of Golf Scientific Committee.

2012 Distinguished Scholar Award (North America Society for the Psychology of Sport and Physical Activity)

D. Membership in Professional Organizations

- 1962-01 **Member** of the American Alliance of Health, Physical Education, Recreation and Dance.
- 1970-01 **Member** of the North American Society for Sport and Physical Activity (NASPSPA).
- 1979-80 **President** of NASPSPA
- 1978-81 Member of the Executive Committee of NASPSPA
- 1974-89 **Member** of the Pennsylvania State Association for Health, Physical Education and Recreation.
- 1979-82 **Member** of the American Psychological Association (APA).
- 1983-95 **Fellow** of the Experimental Psychology Division of APA.
- 1988-95 Fellow and Charter Member of the Exercise and Sport Psychology Division of APA.
- 1985-92 **Member** of the American College of Sports Medicine.
- 1985-87 **Member** of the American Association for the Advancement of Science.
- 1984-01 **Fellow** of the American Academy of Kinesiology and Physical Education.
- 1988-95 **Research Member** of the United States Olympic Committee Sport Psychology Registry.
- 1989-01 <u>Member</u> of the College and University Administrative Council of ARAPCS of the American Alliance of Health, Physical Education, Recreation and Dance.
- 1984-01 Member of the National Association for Physical Education in Higher Education.
- 1990-92 **Fellow** of the American Psychological Society.
- 1991-92 **Executive Committee Member** of the College and University Physical Education Council of NASPE.
- 1990-92 **Member** of the American Society of Allied Health Professions.
- 1992-01 Member of the American Association of Higher Education.
- 1992-01 **Member** of NCAHPERD.
- 1994-05 Member of the Past-Presidents' Council of NASPSPA
- 2001- Emeritus Fellow of the American Academy of Kinesiology and Physical Education
- 2001- **Emeritus member** of the National Association for Kinesiology and Physical Education in Higher Education

2001- **Retired member** of AAHPERD - Now SHAPE

E. Creative Accomplishments

- R. W. Christina was featured in an <u>instructional film</u> entitled, "Teaching Sports Skills to Young Athletes," produced by Barton Cox, Jr. Filmed and used by Human Kinetics Publishers in their American Coaching Effectiveness Program.
- R. W. Christina appeared on <u>national television (NBC)</u> on April 30, 1983. The interview focused on the "Aging Professional Athlete in Sports" especially in major league baseball.
- R. W. Christina was interviewed as an authority in the area of "Performance Slumps in Sport." Comments from this interview appeared in the November 1983 issue of Golf Magazine.
- R. W. Christina was interviewed as an authority in the area of "Neuromuscular Coordination." Comments from this interview appeared in the January 1984 issue of <u>Runners World Magazine</u>.
- R. W. Christina was interviewed as an authority in the area of "Hand-Eye Coordination." Comments from this interview appeared in the April 1984 issue of <u>Gentleman's Quarterly</u>.
- 1986 R. W. Christina appeared in November 1985 on <u>Cable News Network (CNN)</u> which nationally televised a report on the "Sonic Feedback System for Learning Fine Motor Skills" that was developed by him. The report was shown on the Science and Technology Segment of CNN.
- R. W. Christina wrote the text that was narrated in a 28-minute <u>instructional video</u> which focused on "Teaching Sport Skills." He also was one of several experts featured in the video, which was produced by Human Kinetics Publishers for use in their American Coaching Effectiveness Program.
- R. W. Christina's shooting research was featured in an article entitled "Hearing Where the Bullet Hit" published in <u>Outdoor Life</u>, 126-128, November 1987.
- R. W. Christina developed and appeared in an <u>instructional video tape</u> which introduces students to research in the area of Motor Control and Learning.
- Appeared as one of several experts featured in the video which was produced by <u>Human Kinetics</u> Publishers for use in their "American Coaching Effectiveness Program."
- Appeared as one of several experts featured in a video which "Introduces Golfers to Pathfinder Feedback"- produced by Laser Track, Inc.
- Appeared on <u>national television (Golf Channel)</u> in December 2000. The interview focused on teaching and learning golf skills.
- 2000 Keynote presentation to the Professional Golfers of America (PGA) was featured in a video at the 2000 PGA Teaching and Coaching Summit.
- 2001 Research was cited and discussed in <u>Golf World Business</u>-A Golf Digest Publication.
- 2004 Interviewed as an authority on golf training aids, which was published in Golf Digest (August 2004).
- 2005 Research was featured in a report by the <u>Wall Street Journal</u> on "How Science Can Improve Your Golf Game."

- 2009-11 Several appearances on ESPN Radio to discuss various aspects of our golf research
- 2010 Research was featured in a <u>New York Times</u> article on the "Key to Improved Putting."

RESEARCH

- A. Total Publications = 135 (Refereed Research Articles = 50; Applied Research and Professional Articles = 37; Books Edited = 7; Books Co-authored = 4; Chapters in Books = 19; Published Abstracts = 19)
 - 1. Refereed Research Articles (49)
 - Christina, R. W. (1967). Side-arm positional test of kinesthetic sense. Research Quarterly, 38, 177-188.
 - Schmidt, R. A., & Christina, R. W. (1969). Proprioception as a mediator in the timing of motor responses. <u>Journal of Experimental Psychology</u>, <u>81</u>, 303-307.
 - Christina, R. W. (1970). Proprioception as a basis for the temporal anticipation of motor responses. <u>Journal of Motor Behavior</u>, <u>2</u>, 125-133.
 - Christina, R. W. (1970). Minimum visual feedback processing time for the amendment of an incorrect movement. Perceptual & Motor Skills, 31, 991-994.
 - Christina, R. W. (1971). Movement-produced feedback as a mechanism for the temporal anticipation of motor responses. <u>Journal of Motor Behavior</u>, <u>3</u>, 97-104.
 - Christina, R. W. (1973). Effect of enforced motor and sensory sets on reaction latency and movement time. Research Quarterly, 44, 483-487.
 - Christina, R.W. (1976). Proprioception as a basis of anticipatory timing behavior. In G.E. Stelmach (Ed.), Motor Control: Issues and Trends, 187-199. New York: Academic Press.
 - Christina, R. W., & Buffan, J. L. (1977). Preview and movement as determiners of timing a discrete motor response. Journal of Motor Behavior, 8, 101-112.
 - Christina, R. W., & Merriman, W. (1977). Learning the direction and extent of a movement. <u>Journal of Motor Behavior</u>, <u>9</u>, 1-9.
 - Christina, R. W. (1977). The motor learning of children. In M. Riley (Ed.) <u>Echoes of Influence for Elementary Physical Education</u>, pp. 56-61. Washington, D.C. AAHPERD.
 - Christina, R. W. (1977). Skilled motor performance: Anticipatory timing. In B.B. Wolman (Ed.), <u>International Encyclopedia of Psychiatry</u>, <u>Psychology</u>, <u>Psychoanalysis</u>, and <u>Neurology</u>. New York: Van Nostrand Reinhold.
 - Cauraugh, J., & Christina, R.W. (1978). Proprioceptive feedback as a mediator in interlimb timing. <u>Journal of</u> Motor Behavior, 10, 1239-244.
 - Christina, R. W., & Cornell, P. (1979). The effect of movement amplitude and target diameter on reaction time: Comments on Siegel (1977). <u>Journal of Motor Behavior</u>, <u>11</u>, 87-90.
 - Goggin, N., & Christina, R. W. (1979). Reaction time analysis of programmed control of short, rapid aiming

- movements. Research Quarterly, 50, 360-368.
- Christina, R.W., & Anson, J. G. (1981). The Learning of programmed- and feedback-based processes controlling the production of a positioning response in two dimensions. <u>Journal of Motor Behavior</u>, <u>13</u>, 48-64.
- Margolis, J., & Christina, R. W. (1981). A test of Schmidt's schema theory of discrete motor skill learning. Research Quarterly for Exercise and Sport, 52, 474-483.
- Toole, T., Christina, R. W., & Anson, J. G. (1982). Preselected movement accuracy as a function of movement, time, distance, and velocity. <u>Human Movement Science</u>, <u>8</u>, 93-102.
- Christina, R. W., Lambert, P.J., & Fischman, M.G. (1982). Hand position as a variable determining the accuracy of aiming movements. <u>Journal of Experimental Psychology: Human Perception and Performance</u>, 8, 341-348.
- Fischman, M. G., Christina, R. W., & Vercruyssen, M. J. (1982). Retention and transfer of motor skills: A review for the practitioner. Quest, 33, 181-183.
- Christina, R. W., Fischman, M.G., Vercruyssen, M., & Anson, J. G. (1982). Simple reaction time as a function of response complexity: Memory drum theory revisited, <u>Journal of Motor Behavior</u>, <u>14</u>, 301-321.
- Sullivan, M. P., & Christina, R. W. (1983). Target location and visual feedback is variables determining accuracy of aiming movements. <u>Perceptual & Motor Skills</u>, <u>56</u>, 355-358.
- Canabal, M., Christina, R. W., & Lundegren, H. (1984). Organization of movement information for effective recall in children. Perceptual & Motor Skills, 59, 139-142.
- Christina, R., & Rose, D. (1985). Premotor and motor reaction time as a function of response complexity. Research Quarterly for Exercise and Sport, <u>56</u>, 306-315.
- Christina, R., Fischman, M., Lambert, A., & Moore, J. (1985). Simple reaction time as a function of response complexity. Christina et al. (1982) Revisited. <u>Research Quarterly for Exercise and Sport, 56</u>, 316-322.
- Christina, R.W., Lambert, A., & Rose, D. (1985). Future research directions in psychomotor learning and performance. In J. Shemick (Ed.), <u>Perceptual and Psychomotor Learning in Industrial Arts Education</u>, pp. 223-246. Peoria, IL: Bennet & McKnight.
- Sidaway, B., Christina, R., & Shea, J. (1988). A movement constraint interpretation of the response complexity effect on programming time, pp. 87-102. In A. Colley and J. Beech (Eds.), <u>Cognition and Action in Skilled Behavior</u>. Amsterdam: Elsevier North-Holland Publishers.
- Christina, R.W., & Shea, J. (1988). The limitations of generalization based on restricted information. <u>Research Quarterly for Exercise and Sport, 59, 291-297.</u>
- Christina, R.W. (1989). Whatever happened to applied research in motor learning? In J. Skinner, C. Corbin, D. Landers, P. Martin, and C. Wells. (Eds.), <u>Future Directions in Exercise and Sport Science Research</u>, pp. 411-422. Champaign, IL: Human Kinetics.
- Christina, R.W., Barresi, J., & Shafner, P. (1990). The development of response selection skills in a football linebacker using video training. The Sport Psychologist, 4, 11-17.

- Rose, D., & Christina, R. (1990) Attentional demands of precision pistol shooting as a function of skill level. Research Quarterly for Exercise and Sport, 61, 111-113.
- Cauraugh, J., & Christina, R. (1989). Psychomotor decline can be described by discontinuities in response trajectories: Comments on Vrtunski and Patterson (1985). <u>International Journal of Neuroscience</u>, <u>48</u>, 247-250.
- Gordon, A., & Christina, R. (1991). Programming time as a function of movement constraint. <u>Research</u> Quarterly for Exercise & Sport, 61, 338-343.
- Christina, R. W., & Cauraugh, J. (1990). Time needed to change the isometric force production of a response. Research Quarterly for Exercise and Sport, 62, 338-343.
- Taylor-Nicholson, M., Wang, M., Airhihenbuwa, C., Christina, R., Mahoney, B. & Maney, D. (1992). Biobehavioral effects of acute alcohol intoxication. <u>Journal of Studies on Alcohol</u>, 53, 349-356.
- Stull, G.A., Christina, R.W., & Quinn, S.A. (1991). Accuracy of references in <u>Research Quarterly for Exercise</u> and <u>Sport</u>. <u>Research Quarterly for Exercise and Sport</u>, <u>62</u>, 245-248.
- Christina, R.W. & Bjork, R.A. (1991). Optimizing long-term retention and transfer. In D. Druckman & R. Bjork (Eds.), <u>In the Minds Eye</u>: Enhancing human performance, pp. 23-56. Washington, D.C.: National Academy Press.
- Christina, R.W. (1992). The 1991 C.H. McCloy research lecture: Unraveling the mystery of the response complexity effect in skilled movements. Research Quarterly for Exercise and Sport, 63, 218-230.
- Wang, M., Taylor-Nicholson, Airhihenbuwa, C., Mahoney, B., Fitshugh, E., & Christina, R.W. (1992). Psychomotor and visual performance under the time-course effect of alcohol. <u>Perceptual and Motor Skills</u>, 75, 1095-1106.
- Christina, R.W. & Shea, J.B. (1993). More on assessing the retention of motor learning based on restricted information. Research Quarterly for Exercise and Sport, 64, 217-222.
- Reeve, T.G., Fischman, M., Christina, R.W., & Cauraugh, J. (1994). Using one-dimensional task error measures to assess performance on two-dimensional tasks: A comment on Singer et al (1991). <u>Human Performance</u>. 7, 315-319.
- Christina, R.W. (1997). Concerns and issues in studying and assessing motor learning. <u>Measurement in</u> Physical Education and Exercise Science. 1, 19-38.
- Brauner, C. & Christina, R. (1999). The Yips. Golf Science International, Issue 2, 6-7.
- Brauner, C. & Christina, R. (1999). The Yips: Curing the Curse. Golf Science International, Issue 3, 6-7.
- Christina, R.W. (2002). Why does traditional training fail to optimize playing Performance? In E. Thain (Ed.), Science and Golf IV, pp. 231-245. New York: Routledge.
- Dail, T. & Christina, R. W. (2004). Distribution of practice and metacognition in the learning and long-term retention of a discrete motor task. Research Quarterly for Exercise and Sport, 75, 148-155.
- Fischman, M. G., Christina, R. W. & Anson, J. G. (2008). Memory Drum Theory's "C" movement:

- Revelations from Franklin Henry. Research Quarterly for Exercise and Sport, 79, 312-318.
- Thomas, F., Christina, R., Melvin, V & Alpenfels, E. (2008). Growing the game: A survey report. In D. Crews & R. Lutz (Eds.), Science and Golf V: Proceedings of the World Scientific Congress of Golf. Mesa, AZ: Energy in Motion Inc.
- Christina, R. W., Alpenfels, E. & Santiago, N. (2008). Transfer of driving performance as a function of two practice methods. In D. Crews & R. Lutz (Eds.), Science and Golf V: Proceedings of the World Scientific Congress of Golf. Mesa, AZ: Energy in Motion Inc.
- Christina, R. W., & Alpenfels, E. (2014). Influence of attentional focus on learning a swing path change. International Journal of Golf Science, 3, 35-49.
- Christina, R. W. & Alpenfels, E. (in press). Factors Influencing the Effectiveness of Modeling Golf Technique. <u>Handbook of Golf Science</u>. Routledge.

2. Books Edited (7), Co-authored (4) and Chapters in Books (19)

- Christina, R. W. (Ed.) (1972) <u>Psychology of Motor Skill Learning</u>, 260 pp. New York: Simon and Schuster. (Book)
- Christina, R. W., & Shaver, L. G., (Ed.) (1972) <u>Biological and Psychological Perspectives in the Study of Human Motor Behavior</u>, 519 pp. Kendall/Hunt, Dubuque, IA. (Book)
- Landers, D. M., Harris, D. V., & Christina, R. W., (Eds.). (1975). <u>Psychology of Sport and Motor Behavior 11</u>, University Park, PA: Penn State HPER Series. (Book)
- Christina, R. W., (1976). Anatomical and physiological foundations. In R. Singer (Ed.), <u>Physical Education</u> <u>Foundations</u>, pp. 189-205. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R. W. (1976). Exercise physiology. In R. Singer (Ed.), <u>Physical Education Foundations</u>, pp. 207-219. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R. W., (1976). Growth and development. In R. Singer (Ed.), <u>Physical Education Foundations</u>, pp. 233-245. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R. W., (1976). Psychological dimensions. In R. Singer (Ed.), <u>Physical Education Foundations</u>, pp. 247-267. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R. W., (1976). Measurement and evaluation. In R. Singer (Ed.), <u>Physical Education Foundations</u>, pp. 287-298. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R. W. (1976). Research. In R. Singer (Ed.), <u>Physical Education Foundations</u>, pp. 298-308. New York: Holt, Rinehart & Winston. (Chapter)
- Christina, R.W., & Landers, D. M. (Eds). (1978). <u>Psychology of Motor Behavior and Sport</u>, Volume 1. 286 pp. Champaign, IL: Human Kinetics. (Book)
- Christina, R. W., & Landers, D.M. (Eds.). (1977). <u>Psychology of Motor Behavior and Sport</u>. Volume II 2:273 pp. Champaign, IL: Human Kinetics. (Book)

- Landers, D.M., & Christina, R.W. (Eds.). (1978). <u>Psychology of Motor Behavior and Sport</u>, 543 pp. Champaign, IL: Human Kinetics. (Book)
- Martens, R., Christina, R.W., Sharkey, B., & Harvey, J. (1981). <u>Coaching Young Athletes</u>, 300 pp. Champaign, IL: Human Kinetics. (Book)
- Christina, R., Lambert, A., & Rose, D. (1985). Future directions in psychomotor learning and performance. In J. Shemick (Eds.), <u>Perceptual and Psychomotor Learning in Industrial Arts Education</u>, pp. 223-246. IL: Bennet & McKnight Publishing Co. (Chapter)
- Christina, R. & Corcos, D. (1988). <u>Coaches Guide to Teaching Sports Skills.</u> 153 pp. Champaign, IL: Human Kinetics. (Book)
- Christina, R.W. & Eckert, H. (Eds.) (1991). Enhancing human performance in sport: New concepts and developments. <u>American Academy of Physical Education Papers</u> (No. 25). Champaign, IL: Human Kinetics. (Book)
- Rose, D. J. & Christina, R. W. (2006). <u>A Multilevel Approach to the Study of Motor Control and Learning</u>. pp. San Francisco, CA: Pearson/Benjamin Cummings. (Book)
- Heath, C., Christina, R. W. & Alpenfels, E. (2008). Instinct Putting. New York: Gotham Books. (Book)
- Christina, R. (2010). Introduction to how students learn. In <u>PGA Professional Golf Management Program</u>: Knowledge-Application-Integration, pp. 7-20. FL: The PGA of America. (Chapter)
- Christina, R (2010). How students process information when learning. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, pp 21-29. FL: The PGA of America. (Chapter)
- Christina, R. (2010). Principles of effective practice. In <u>PGA Professional Golf Management Program</u>: <u>Knowledge-Application-Integration</u>, pp. 30-40. FL: The PGA of America. (Chapter)
- Christina, R. (2010). How junior golfers learn. In PGA <u>Professional Golf Management Program: Knowledge-Application-Integration</u>, pp. 41-54. FL: The PGA of America. (Chapter)
- Christina, R. (2011). How feedback functions in learning golf skills. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, pp. 6-17. FL: The PGA of America. (Chapter)
- Christina, R. (2011). Factors influencing the effectiveness of augmented feedback. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, pp. 18-30. FL: The PGA of America. (Chapter)
- Christina, R. (2011). Timing and frequency of augmented feedback. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, pp 31-39. FL: The PGA of America. (Chapter)
- Christina, R. (2011). Variables influencing the effectiveness of practice. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, pp. 40-52. FL: The PGA of America. (Chapter)
- Christina, R. (2012). Mental practice and motor imagery. In <u>PGA Professional Golf Management Program</u>: Knowledge-Application-Integration, (in press). FL: The PGA of America. (Chapter)

- Christina, R. (2012). Optimizing the transfer of golf skill learning. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, (in press). FL: The PGA of America. (Chapter)
- Christina, R. (2012). Learning to make swing changes. In PGA <u>Professional Golf Management Program</u>: Knowledge-Application-Integration, (in press). FL: The PGA of America. (Chapter)
- Christina, R. (2012). The mental game. In <u>PGA Professional Golf Management Program: Knowledge-Application-Integration</u>, (in press). FL: The PGA of America. (Chapter)

3. Articles (35) and Abstracts (19) Published in Non-refereed Journals, Proceedings, and Books

- Christina, R. W. (1966). Timing the pitch in baseball. Coaching Clinic 4 (14), 2-3.
- Christina, R. W. (1967). Relationship of kinesthesis to physical education. <u>The Physical Educator</u>, <u>24</u> (4). 167-168.
- Christina, R. W. (1968). A point on grading. New York Journal of Health, Physical Education & Recreation, 20 (3), 20-21.
- Schmidt, R. A., & Christina, R. W. (1969). Proprioception as a mediator in the timing of motor responses. In <u>Abstracts of Research Papers 1969/AAHPER Convention</u>, p. 19. Edited by F. Z. Cumbee, AAHPER, Washington, DC. (Abstract).
- Christina, R. W. (1970) Proprioception as a basis for the anticipatory timing of motor responses. <u>Dissertation Abstracts International.</u> 31, 3015B 3016B. (Abstract).
- Christina, R. W. (1978). The state of research on the motor learning of adults and implications for future research. Proceedings of the NAPECW/NCPEAM National Conference, pp. 60-64.
- Christina, R. W. (1981). Three aspects of learning and teaching techniques. <u>Journal of United States Ski</u> <u>Coaches Association</u>, <u>4</u>, 9-11.
- Landers, D. M., Christina, R.W., Hatfield, B.D., Daniels, F. & Doyle, L. (1980). Moving competitive shooting into the scientist's Lab. <u>American Rifleman</u>, 128, 36-38, 76-77.
- Christina, R. W., (1981). Making changes in diving technique. <u>Proceedings of the United States Diving</u> Association Sports Science Seminar, pp. 151-160.
- Christina, R. W., Fischman, M. G., & Anson, J. G. (1981). Increased latency for complicated movements: Memory drum theory revisited. In G. A. Stull (Ed.) In <u>Abstracts of Research Papers 1981/AAHPERD</u>, p. 42. Reston, VA: AAHPERD (Abstract).
- Landers, D., Christina, R. W., Feltz, D.L., Hatfield, B., & Daniels, F. (1981). Demographic and physical characteristics of shooters. In G. Roberts & D. Landers (Eds.). In <u>Psychology of Motor Behavior and Sport-1980</u>, p. 89. Champaign, IL: Human Kinetics Publishers. (Abstract).
- Landers, D., Christina, R. W., Hatfield, B., Daniels, F., Wilkinson, M., & Doyle, L., Feltz, D. (1981). A comparison of elite and subelite competitive shooters on selected physical, psychological, and psychophysiological tests. In G. Roberts & D. Landers (Eds.) in Psychology of Motor Behavior and Sport-1980, p. 93. (Abstract).

- Christina, R. W., Anson, G., Fischman, M., Vercruysssen, M., & Lambert, A. (1982). Memory drum theory revisited: Alternative explanations for the effect of response complexity on simple reaction time. In <u>Psychology of Motor Behavior & Sport-1982</u>, pp. 21-25. (Four Abstracts).
- Christina, R. W., & Vercruyssen, M. (1983). The relationship between strength and pistol shooting performance.
 - In the Canadian Journal of Applied Sport Sciences, 8, 199, (1983). (Abstract).
- Birrell, S., Christina, R., Fell, R., Gladden, B., Stamford, B., Swank, A. & Yates, J. (1986). Review of the book entitled <u>Exercise and Sport Sciences Reviews</u>, <u>13</u>, 596 pp. (1985). <u>Research Quarterly for Exercise</u> and Sport, 57, 345-347.
- Rose, D., & Christina, R. W. (1984). Neuromotor programming time as a function of three elements of response complexity. In <u>Psychology of Motor Behavior & Sport 1984</u>. (Abstract).
- Johnson, L., Christina, R., & Leibowitz, H. (1986). The role of vision in compensating for vestibular after-effects during skilled performance. In <u>Psychology of Motor Behavior and Sport 1986</u>. (Abstract).
- Christina, R. (1987). Motor learning: Future lines of research. M. Safrit & H. Eckert (Eds.). <u>Proceedings of the American Academy of Physical Education</u>, pp. 26-41. The cutting edge in physical education and exercise science research. Champaign, IL: Human Kinetics.
- Christina, R. W. (1987). Basic versus applied research in motor learning? It all depends on your view. AAHPERD Research Consortium Newsletter, pp. 1-2.
- Sidaway, B., Christina, R.W., & Shea, J.B. (1988). A movement constraint interpretation of the response complexity effect on programming time. <u>Psychology of Motor Behavior and Sport</u>, p. 23. (Abstract).
- Vercruyssen, M., Christina, R., Muller, E., Grose, E. (1988). Strength training and precision pistol shooting activities. Proceedings of the Human Factors Society 32nd Annual Meeting. (Abstract).
- Christina, R.W. (1989). Motor learning principles applied to coaching track and field skills. <u>The Athletics</u> Congress Newsletter.
- Christina, R.W., & Davis, G. (1990). Principles of teaching skill progressions. In J. Gabriel (Ed.). <u>United States Diving Safety Manual.</u> Champaign, IL: Human Kinetics.
- Li, Y., Christina, R.W., & Wright, D.L. (1991). Role of proprioceptive feedback in perceptual anticipating timing. In <u>Psychology of Motor Behavior and Sport</u>, p. 132. (Abstract).
- Christina, R.W. (1996). Variables influencing long-term retention: Implications for enhancing sport performance. In Proceedings of the Pre-Congress Symposium of the 1996 Seoul International Sport Science Congress. Seoul, Korea: Korean Alliance for Health, Physical Education, Recreation and Dance, pp.15-31.
- Christina, R.W. (1996). Major determinants of the transfer of training: Implications for enhancing sport performance. In Proceedings of Human Performance in Sport. Seoul, Korea: Korean Society of Sport Psychology, pp. 25-52.
- Christina, R.W. (1997). Optimizing the learning of motor skills. <u>Proceedings of the Sixth Greece International Congress on Physical Education and Sport</u>. (Abstract).

- Christina, R.W. (1997). Problems in measuring motor learning. <u>Proceedings of the Sixth Greece International Congress on Physical Education and Sport</u>. (Abstract).
- Christina, R.W. (2000). The issue of overspecialization in doctoral programs: A response to Thomas. <u>The Chronicle of Physical Education in Higher Education</u>, pp 1-7.
- Christina, R.W. (2000). Advancing engagement in kinesiology and physical education. <u>Quest</u>, <u>52</u>, 315-329. (The Twentieth Dudley Allen Sargent Commemorative Lecture 2000).
- Christina, R. W. (2014). Professionalism, golf coaching and a master of science degree" A commentary. International Journal of Sports Sciences & Coaching, 9(4), 887 889.

(Note: All Golf Magazine articles that follow are based on research that was conducted by the authors.)

- Christina, R. W., Anderson, L., & Alpenfels, E. (2003). The best slice cure ever. Golf Magazine, 45 (1), 86-93. (Cover Story)
- Christina, R. W. & Alpenfels, E. (2003). No more three-putts. Golf Magazine, 45 (3), 88-89.
- Christina, R. W. & Alpenfels, E. (2003). Sand saves. Golf Magazine, 45 (4), 107-108.
- Christina, R. W. & Alpenfels, E. (2003). Pure pitches. Golf Magazine, 45 (6), 123-124.
- Christina, R. W., Alpenfels, E., & Anderson, L. (2003). Two chip tips. Golf Magazine, 45 (2), 66-68.
- Christina, R. W., Alpenfels, E., & Anderson, L. (2003). Backswing fix. Golf Magazine, 45 (7), 83-84.
- Christina, R. W., Alpenfels, E., & Anderson, L. (2003). Slice relief. Golf Magazine, 45 (8), 81-82.
- Christina, R. W., Alpenfels, E, & Anderson, L. (2003). Sink more knee-knockers. Golf Magazine, 45 (9), 91-92.
- Christina, R. W., Alpenfels, E., & Anderson, L. (2003). Power drills. Golf Magazine, 45 (10), 83-84.
- Christina, R. W., Alpenfels, E. & Anderson, L. (2003). Practice makes ... better? <u>Golf Magazine</u>, <u>45 (11)</u>, 93-94.
- Christina, R. W., Alpenfels, E., & Anderson, L. (2004). New golf science: Another path to power. <u>Golf Magazine</u>, 46 (10), 66-78. (Cover Story)
- Christina, R. W., Alpenfels, E., & Anderson, L. (2004). Putter test. Golf Magazine, 47 (11), 121-140. (Cover Story)
- Christina, R. W., Alpenfels, E., & Dusek, D. (2005). The new way to putt. Golf Magazine, 47 (10), 95-99. (Cover Story)
- Christina, R. W., & Alpenfels, E. (2006). Tee it high or low? Golf Magazine, 48 (6), 172-179. (Cover Story)
- Christina, R. W., & Alpenfels, E. (2007). How to make swing changes stick. Golf Magazine, 49 (9), 65-69.
- Christina, R. W., & Alpenfels, E. (2007). How to play the 10 toughest wedge shots. Golf Magazine. 49 (12), 107-115. (Cover Story)

Christina, R. W., & Alpenfels, E. (2008). Practice like you play for transfer. In D. Crews (ED.), <u>Future of Golfers: Conference Presentations 2001</u> (pp. 239 – 244). Mesa, AZ: Energy in Motion Inc.

DeNunzio, D., & Christina, R. W. (2009). The new way to improve: How we learn. Golf Magazine, 51 (9), 91 – 104.

Christina, R. W., & Alpenfels, E. (2011). New grip revolution! Golf Magazine, 53 (1), 77-86. (Cover Story)

Christina, R. W., Alpenfels, E., & Mitchum, K. (2012). Reading Putts as a Function of Viewing Position, and Amount and Direction of Break. <u>World Scientific Congress of Golf VI</u>. Phoenix, AZ (March 2012). (Abstract)

Christina, R. W., & Alpenfels, E. (2012). Learning Swing Changes as a Function of Internal and External Focus of Attention Cues. World Scientific Congress of Golf VI. Phoenix, AZ (March 2012). (Abstract)

Christina, R. W., Alpenfels, E., & Mitchum, K. (2015). First things first: You seriously under-read your putts. Golf Magazine, 57 (5), 66.

B. Record of Funded Research (\$313,155.00)

Graduate School Dissertation Fellowship
"Proprioception as a Basis for the Anticipatory Timing of Motor Responses"

University of Maryland Project is: Completed, 1969 \$600.00

State University of New York Research Foundation Grant "Proprioception and the Timing of Motor Responses"

SUNY College at Brockport Project is: Completed, 1970 \$2,076.00

State University of New York Research Foundation Grant
"Influence of Enforced Motor and Sensory Sets on Reduction Latency and Movement Speed"
SUNY College at Brockport
Project is: Completed, 1971
\$2,125.00

National Science Foundation
"Institution Research Grant for Equipment"

SUNY College at Brockport Project is: Completed, 1972 \$1,300.00

Research Inititation Grant

"Skilled Motor Performance: Anticipatory Timing"

Penn State University

Project is: Completed, 1975

\$4,149.00

National Rifle Association Research Grant

"The Psychological, Physical and Psychological Profile of Elite and Sub-Elite Rifle Shooters"

Penn State University

Project is: Completed, 1980

\$5,100.00

National Rifle Association Research Grant

"Further Research on Elite and Sub-Elite Rifle Shooters"

Penn State University

Project is: Completed, 1980

\$1,000.00

National Institute of Health, Biomedical Research Grant

"Fractionated Reaction Time as a Function of Age and Physical Activity Level"

Penn State University

Project is: Completed, 1981

\$24,850.00

Penn State University Internal Funds for Research

"Research Grant for Equipment"

Penn State University

Project is: Completed, 1982

\$10,255.00

National Rifle Association Research Grant

"The Effect of a Training Program to Improve Grip, Arm, and Shoulder Strength on Pistol Shooting Performance"

Penn State University

Project is: Completed, 1982

\$2,000.00

National Rifle Association Research Grant

"The Relationship of center of mass, leg strength, body sway, movement of the gunbarrel, and shooting performance of elite and sub-elite competitors"

Penn State University

Project is: Completed, 1983

\$3,000.00

International Shooters Development Fund Research Grant

"Motor control characteristics of elite shooters"

Coauthored with D. Landers of Arizona Sate University and C. Dillman of the U. S. Olympic Training Center at Colorado Springs

Penn State University

Project is: Completed, 1984

\$16,000.00

National Rifle Association Research Grant

"Development of a portable, low-cost prototype instructional shooting training device"

Penn State University

Project is: Completed, 1984

\$6,000.00

National Rifle Association Research Grant

"Attentional demands in competitive pistol shooting"

Penn State University

Project is: Completed, 1985

\$2,700.00

National Rifle Association Research Grant

"The role of visual and auditory feedback in learning to reduce the variability of the hold position"

Penn State University

Project is: Completed, 1985

\$3,000.00

Penn State University Internal Funds for Research

"Research Grant for Equipment"

Penn State University

Project is: Completed, 1986

\$20,000.00

National Rifle Association and U. S. Shooting Team Research Grant

"Continuation of the study of the auditory feedback in learning to reduce the variability of the hold position"

Penn State University

Project is: Completed, 1986

\$7,000.00

Penn State University Internal Funds for Research

"Pharmacokinetic and behavioral effects of acute alcohol intoxication"

Coauthored with M. Taylor, M. Wang, & C. Airhihenbuwa.

Penn State University

Project is: Completed, 1989

\$5,000.00

National Rifle Association Research Grant

"Effect of dry-fire training with augmented visual feedback on pistol performance of novices"

Penn State University

Project is: Completed, 1990

\$6,000.00

Laser Track, Inc.

"Effect of Short-term Training with Pathfinder Feedback on the Swing of Experienced Golfers:"

State University of New York at Buffalo

Project is: Completed, 1991

\$2,500.00

1980-81

1981-83

National Rifle Association Grant

"Steadiness of Aiming a Pistol as a Function of Magnified Visual Feedback During Dryfire Training"

State University of New York at Buffalo Project is: Completed, 1991 \$2,500.00

Training Grant for Physical Therapy Clinical Education sponsored by Kuwait University "Provision of physical therapy clinical education services to Kuwait students"

State University of New York at Buffalo Project is: Completed, 1991 \$168,000.00

SERVICE

A. Record of Major Committee Work at the Department Level and Service to Public:

Member of the Doctoral Admissions Committee (PSU).

Chair of the Doctoral Admissions Committee (PSU).

1973-74	Graduate Health and Physical Education Faculty AD HOC Committee to consider the Ph Ed 530 research sequence of offering. (Penn State University - PSU).
1973-75	Member of the Doctoral Candidacy Committee (PSU).
1975-76	Member of the Graduate Physical Education Committee to establish evaluative criteria for research and laboratory faculty (PSU).
1975-76	Member of the Undergraduate Professional Physical Education (PSU).
1976-77	Chair of the Doctoral Candidacy Committee (PSU).
1976-78	Member of the Graduate Physical Education Laboratories/Institutes Promotion and Tenure Peer Review Committee (PSU).
1978-80	Chair of Undergraduate Professional Physical Education Committee for the Behavioral Sciences (PSU).
1980-83	Undergraduate Honors Advisor in Physical Education for the University Scholars Program (PSU).
1980	Chair of the search committee for a department head in physical education (PSU).
1981	Member of the search committee for a faculty member in the area of motor behavior, development and sport psychology (PSU).

1982-83	Chair of the Advisory Committee in Physical Education (PSU).
1983-84 1984-86	Mentor participant in the State College Area School District's Gifted Program. [Public] (PSU). Member of the Promotion and Tenure Committee (PSU).
1984-86	Chair of the Doctoral Candidacy Committee. (PSU).
1987-89	Member of the Doctoral Candidacy Committee (PSU).
1985-86	Member of the Committee for Exercise Science and Aging Option (PSU).
1986	Member of the Undergraduate Sport Science Laboratory Committee (PSU).
1987-88	Chair of the Promotion and Tenure Committee (PSU).
1987-89	Member of the Graduate Program Advisory Committee (PSU).
1990-92	Ex-officio member of the Undergraduate Affairs Committee (University at Buffalo - UB).
1990-92	Ex-officio member of the Graduate Affairs Committee (UB)
1990-92	Chair of the Department of Physical Therapy and Exercise Science (UB).
Record of I	Major Committee Work at the College/School Level:
1975-78	Member of the Executive Committee representing the research and laboratory faculty (PSU).
1975-77	Member of the Academic Standards Committee (PSU).
1977-79	Chair of the Academic Standards Committee (PSU).
1978-79	Member of the Promotion and Tenure Review Committee (PSU).
1978-79	Member of the AD HOC Committee on Health, Physical Education and Recreation Voting Procedures (PSU).
1978-79	Member of the Promotion and Tenure Committee to review PS-23 (PSU).
1979-80	Member of the Committee to determine the feasibility and desirability of creating a position of "Head of Physical Education" (PSU).
1979-80	Member of the Promotion and Tenure Review Committee (PSU).
1981-82	Member of the Promotion and Tenure Review Committee (PSU).
1983	Member of the Dean's Advisory Committee on Future Research Directions of the College (PSU).
1984-86	Chair of the Graduate Faculty Status Review Committee (PSU).
1985-86	Member of the Search Committee for an Associate Professor in the Applied Physiology Program (PSU).
1987-88	Member of the Sabbatical Leave Committee (PSU).

B.

1988-89	Member of the Bio-Behavioral Health Search Committee, search for 3 senior level positons (PSU).
1988-89	Chair of the Committee to Review College Research Proposals (PSU).
1990-92	Member of the School of Health Related Professions Executive Committee (UB).
1991	Chair of The School's Conference Committee (UB).
1992-01	Chair of the Dean's Administrative Cabinet (UNCG).
1992-01	Ex Officio member of the School Personnel Committee (UNCG).
1992-01	Ex Officio member of the School Governing Board - Friends of the School of HHP (UNCG).
Record of	Major Committee and Administrative Experience at the University Level:
1978-79	Chair of a University Subcommittee to Review the Recreation and Parks Graduate Program (PSU).
1980-82	Member of the Graduate Council Fellowship and Awards Committee (PSU).
1982-83	Member of the Graduate Council (PSU).
1982-83	Representative of the College of HPER on the Faculty Advisory Committee to the Computation Center (PSU).
1982-83	Member of the Academic Standards Committee of the Graduate Council (PSU).
1983-86	Member of the National Institutes of Health, Biomedical Research Committee which reviewed grant proposals in the biomedical sciences (PSU).
1984-85	Member of the Research Initiation Grant Committee which reviewed grant proposals submitted for internal funding at Penn State University (PSU).
1985-87	Member of the Physiology Faculty Review Committee of the Inter-college Graduate Program in Physiology (PSU).
1987-88	Member of the Search Committee for Head Soccer Coach (PSU).
1990-93	Member of the World University Games Steering Committee (UB).
1990-93	Member of the CESU Local Organizing Committee for the World University Games (UB).
1992-93	Member of the Greensboro Committee Board for Project ASSIST (American Stop Smoking Intervention Study) UNCG.
1992-01	Deans' Council (UNCG).
1992-93	Advisory Council on University Planning and Evaluation (UNCG).
1993-94	Co-chair of Committee on University Wellness (UNCG).

C.

1993-94	Dean's Council Representative to the Faculty Senate (UNCG).
1994-95	Chair of the Self-Study Committee for NCAA Division I Athletics Certification (UNCG).
1995-96	Chair of the Search Committee for the Vice Chancellor for Student Affairs (UNCG).
1995-96	Member of the Committee to Study Continuing Education (UNCG).
1995-96	Member of the University Vision, Mission, Planning Guidelines, and Program Priorities Committee (UNCG).
1996-01	Chair of the University Teaching Workload Committee and member of the UNC System Teaching Workload Task Force.
1997-99	Member of the University Planning Council
1997-00	Member of the Executive Board for the Centers for the Study of Social Issues-CSSI (UNCG).
1997-01	Member of the Advisory Board for the Institute for Health, Science, and Society (UNCG).
1998-01	Member of the Advisory Board for the development of the Hospitality Management Program. (UNCG).
1998-00	Chair of the Faculty Relations Subcommittee of CSSI (UNCG).
1999-00	Member of the Self-Study Committee for NCAA Division I Athletics Certification (UNCG).
1998-00	Chair of the Piney Lake Task Force (UNCG).
1999-01	Member of the University Master Plan Committee (UNCG).
1999-01	Member of the Steering Committee for New Student Programs (UNCG).
2000-01	Member of the Search Committee for the dean of the School of Education (UNCG).
Record of I	Major Administrative Leadership Experience:
1969-73	Director of the Motor Behavior Research Laboratory in Sports Science Department (SUNY at Brockport).
1970-72	Coordinator of Graduate Studies (SUNY at Brockport).
1973-89	Director of the Motor Behavior Research Laboratory in the College of Health and Human Development (PSU).
1973-90	Graduate Program Head of Motor Learning and Control in the Department of Exercise and Sport Science (PSU).
1979-80	President of the North American Society for the Psychology of Sport and Physical Activity.
1989-92	Department Chair of Physical Therapy and Exercise Science in the School of Health Related Professions, State University of New York at Buffalo (UB).

Director of the Motor Control Research Laboratory in the Department of Physical Therapy and

D.

1989-92

	Exercise Science (UB).
1989-92	Graduate Program Head of Motor Control and Learning in the Department of Physical Therapy and Exercise Science (UB).
1991-92	President of the American Academy of Physical Education.
1992-01	Dean of the School of Health and Human Performance (UNCG).
1995-96	Vice President of the National Association of Physical Education in Higher Education.
2/9/17	