JOURNAL OF ATHLETIC TRAINING

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Take this Supplement to St. Louis and use it as a guide to the Free Communications Sessions

Dear NATA Members and Friends:

We are pleased once again to present the annual *Supplement* to the *Journal of Athletic Training*. This supplement contains abstracts presented at the 2003 NATA Annual Meeting & Clinical Symposia as part of the Free Communications program sponsored by the NATA Research & Education Foundation held at the NATA Annual Meeting.

The Free Communications Sessions allow certified athletic trainers and other healthcare providers the opportunity to present and learn about the latest in athletic training research. Research is presented in oral and poster formats and includes general research, Foundation-funded research, thematic posters, and clinical case reports. Abstracts of the research are printed here in the order of presentation at the NATA Annual Meeting for your convenience. Free Communications presentations represent a wide range of research and clinical interests including basic science, clinical studies, educational research, sports injury epidemiology, and observational studies. In addition, the Clinical Case Reports sessions allow you to test your clinical assessment skills. We encourage you to attend these sessions, especially the popular thematic poster presentations that combine oral and poster formats.

We also urge you to attend the sessions featuring research funded by the Foundation. The Foundation not only funds research, but also a variety of educational programs. These include home study programs, the Athletic Training Educators' Conference, the District Lecture Series, and summits on issues critical to athletic training, as well as more than 60 scholarships annually to students of athletic training. It is important to note that responsibility for the development of program content and logistics of presentation of these programs has been assumed by the Continuing Education Committee of the NATA Education Council. The Foundation remains responsible for securing funding for financial support.

Support from NATA members, corporations, and other affiliated groups makes this supplement and all of the Foundation's programs possible. Please note projects funded by the NATA REF and by the generous contributions of our donors are specified in this Supplement. To make an investment in the future of the profession, please contact the Foundation today at 800-TRY-NATA, extension 142. NATA and its Foundation are happy to offer this supplement as a service to NATA members. We hope that it provides you with theoretical and practical information you can use to improve your effectiveness as a certified athletic trainer. Thank you for your support!

Sincerely,

Christopher D. Ingersoll, PhD, ATC
President, NATA Research & Education Foundation

Julie Max, MEd, ATC
President, NATA

Dear Colleagues:

I hope each of you finds something new in this year's Free Communications program and *Journal Supplement*. The program is larger and broader than ever, providing the latest in athletic training research and case studies that address many of the challenges of clinical practice. In the past 5 years, the number of submissions and number of presented papers has nearly tripled. To all who participate, thank you.

Several individuals have worked very hard to review submissions, schedule presentations, and produce this *Supplement*. I would like to take this opportunity to thank and recognize the efforts of Mike Sitler, EdD, ATC, Carl Mattacola, PhD, ATC, Sandy Fowkes Godek, PhD, ATC, Buz Swanik, PhD, ATC, Lenn Johns, PhD, ATC, Susan Norkus, PhD, ATC, and Mark Merrick, PhD, ATC, for their long hours of preparation for the Free Communications programming. A special thank you to Foundation Assistant Karrie Hamstra, MS, ATC/L, whose attention to detail and organization brings order from chaos. Thank you to Patsy Brown, Molly Howard, and John Oliver, CAE, CFRE, in the NATA national office. Their efforts to catalog submissions and communicate with authors, reviewers, moderators, and those who coordinate and plan our convention and symposia is a truly enormous task. Finally, thank you to Leslie Neistadt and the staff at the editorial office of the *Journal of Athletic Training*.

I look forward to our meeting in St. Louis. Please take the opportunity to attend the Free Communications, case studies, poster sessions, and special interest groups, and please note that projects funded by the NATA Foundation are specified in this Supplement. Finally, if you have the opportunity, offer your thanks to those recognized above.

Sincerely,

Craig R. Denegar, PhD, ATC, PT
Vice Chair for Free Communications, NATA Research and Education Foundation Research Committee

JOURNAL OF ATHLETIC TRAINING

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2003 Clancy Medal Recipient

Craig R. Denegar, PhD, ATC, PT
Pennsylvania State University
University Park, PA

Mechanisms, Clinical Studies and Systematic Review: How Can We Best Treat the Injured Athlete?

Dr. Denegar is an Associate Professor in the departments of Orthopaedics & Rehabilitation and Kinesiology at Penn State University. He is the former director of the undergraduate athletic training curriculum, and he currently teaches in the athletic training program and practices physical therapy and athletic training at Penn State Orthopaedics.

Dr. Denegar earned his undergraduate degree in health science from the State University of New York, College at Brockport and completed a master's in education and doctorate in athletic training/sports medicine at the University of Virginia. He earned a master's in physical therapy from Slippery Rock University.

He was the Head Athletic Trainer at Hampden-Sydney College and Virginia Military Institute and has held faculty appointments at Appalachian State University, Slippery Rock University, and Penn State. Additionally, Dr. Denegar has served as an Associate Editor of the *Journal of Athletic Training* for the past nine years and has been Vice Chair for Free Communications for the NATA Research & Education Foundation for six years. He also serves on the Editorial Boards of the *Journal of Sport Rehabilitation* and the *Journal of Strength and Conditioning Research*.

Dr. Denegar has a long-standing interest in pain perception and control, the efficacy of therapeutic modalities and, more recently, has studied clinical outcomes and evidence-based clinical practice. He has presented more than 40 invited lectures and has authored or co-authored more than 50 peer-reviewed manuscripts, several book chapters, and the text *Therapeutic Modalities for Athletic Injuries*.

He lives with his wife, Sue, and sons Charlie and Cody in State College, PA.

The Clancy Medal

Dr. William G. Clancy Jr. is a renowned leader in sports medicine. He was the first in the United States to recognize the need for reconstruction of acute and chronic insufficiencies of the anterior cruciate ligament (ACL). Dr. Clancy developed the patellar tendon ACL reconstruction procedure, a procedure widely used today, and was the first to perform basic scientific research to validate its clinical efficacy. In the late 1970s, Dr. Clancy developed the arthroscopic procedure for ACL reconstruction. He also designed the reconstructive procedure for posterior cruciate ligament instability, which is essentially the only such procedure performed in the world today.

More recently, Dr. Clancy developed a new reconstructive technique for posterolateral instability of the knee, and it presently has the highest success rate of any procedure performed. Not only is he recognized throughout the world for his expertise in knee surgery, Dr. Clancy has an international reputation for excellence in the full gamut of sports-related injuries. He is considered one of the world's leading experts in overuse injuries in sports, particularly among runners.

In addition to his surgical advancements, Dr. Clancy created one of the largest and most prestigious university-based sports medicine programs in the country at the University of Wisconsin, employing and featuring NATABOC-certified athletic trainers as integral health care providers to those involved in physical activity. He has been a friend and colleague of certified athletic trainers throughout his career.

Dr. Clancy is currently an orthopaedic surgeon at the Alabama Sports Medicine & Orthopaedic Center. He is a Clinical Professor for the University of Alabama at Birmingham and the University of Virginia. Dr. Clancy also is the Team Orthopaedic Surgeon for Jacksonville State University and serves as Medical Director for the U.S. Hockey Team. From 1974-1989, he was a Professor of Orthopaedic Surgery and Head Team Physician at the University of Wisconsin. Dr. Clancy is a past President of the American Orthopaedic Society for Sports Medicine and is a fellow of the American Academy of Orthopaedic Surgeons, the American Orthopaedic Association, the International Arthroscopy Association, and the American College of Sports Medicine.

2003 Fu Award Recipient

Sandra J. Shultz, PhD, ATC, CSCS
University of North Carolina at Greensboro
Greensboro, NC

ACL Injury in the Female Athlete: Assessment of Neuromuscular Risk Factors

Dr. Shultz is an Assistant Professor in Exercise and Sport Science at the University of North Carolina at Greensboro, where she serves as Director of Graduate Programs in Athletic Training and Sports Medicine. She received her bachelor's degree from California State University, Fullerton, her master's from the University of Arizona, and her doctorate in sports medicine from the University of Virginia. Prior to obtaining her doctorate, Dr. Shultz was the Associate Director of Athletic Training and Rehabilitation at the University of California, Los Angeles. She has been an NATABOC-certified athletic trainer since 1985.

Dr. Shultz's primary research interests focus on gender-dependent factors in neuromuscular control of knee stability and anterior cruciate ligament injury risk. Current research includes the assessment of reactive neuromuscular response characteristics and biomechanical function at the knee as a function of gender, hormones, limb alignment, and fatigue. Her work has been supported by two NATA Research & Education Foundation grants, and she is a co-investigator and project coordinator on an NIH grant investigating the relationship of gender, hormones and anterior cruciate ligament behavior.

Other scholarly achievements related to her work include 10 papers published or under review with refereed journals and more than 20 scientific abstracts presented at the annual meetings of the National Athletic Trainers' Association and the American College of Sports Medicine. Her paper, "Neuromuscular Response Characteristics in Men and Women After Knee Perturbation in a Single-Leg, Weight-Bearing Stance," earned the 2001 *Journal of Athletic Training* Kenneth L. Knight Award for Outstanding Research Manuscript.

Dr. Shultz is a member of the NATA, the American College of Sports Medicine, and the National Strength and Conditioning Association. She serves on NATA committees for Appropriate Medical Coverage in Intercollegiate Athletics and Pronouncements, and she is a member of the Task Force for Appropriate Medical Care in Secondary School-Aged Athlete. Additionally, Dr. Shultz is an Editorial Board member for the *Journal of Athletic Training*. She is the primary author of *Assessment of Athletic Injuries* and the National Federation of State High School Association's *Sports Medicine Handbook*.

The Fu Award

Dr. Freddie H. Fu, a longtime advocate of NATABOC-certified athletic trainers, is a well-respected physician whose work in sports medicine has earned repeated honors. The 1996 winner of the NATA President's Challenge Award, Dr. Fu is the David Silver Professor of Orthopaedic Surgery and Chairman of the Department of Orthopaedic Surgery at the University of Pittsburgh School of Medicine and the UPMC Health System. He has been the head team physician for the University of Pittsburgh Department of Athletics since 1986. He also was instrumental in establishing the Sports and Preventive Medicine Institute in 1985. Under his leadership, the facility—now called the UPMC Health System Center for Sports Medicine—has grown into the region's largest, most comprehensive sports medicine center and is regarded as among the best in the country.

Dr. Fu holds secondary appointments as Professor of Physical Therapy and Health, Physical and Recreational Education. He was awarded an honorary doctorate of science degree from Point Park College and an honorary doctorate of public service from Chatham College.

Known worldwide for his pioneering surgical techniques to treat sport-related injuries to the knee and shoulder and his extensive research in the biomechanics of such injuries, Dr. Fu performs surgery at UPMC Health System and sees patients at the Center for Sports Medicine. He also directs the University of Pittsburgh's Sports Medicine Fellows Society.

Dr. Fu is the editor of 12 major orthopaedic textbooks and author of 60 book chapters on managing sports injuries. He has contributed to more than 150 international research publications and has given more than 400 national presentations. Former President of the Pennsylvania Orthopaedic Society, he is a member of 40 other professional and academic medical organizations.

Dr. Fu has served as Chairman of the Board and Executive Medical Director of the City of Pittsburgh Marathon Inc, Company Physician and Board Member for the Pittsburgh Ballet Theatre, and Team Physician for Mt. Lebanon High School. Additionally, he is past President and Chairman of the Children's Festival Chorus and has served the Parental Stress Center, the Pittsburgh Employment Alliance, and the Organization of Chinese Americans.