

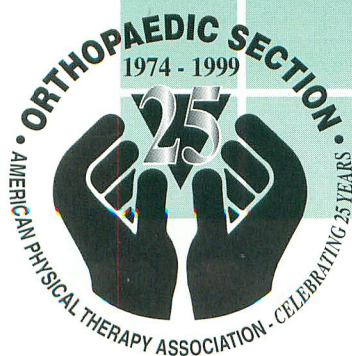
# ORTHOPAEDIC

# PHYSICAL THERAPY PRACTICE

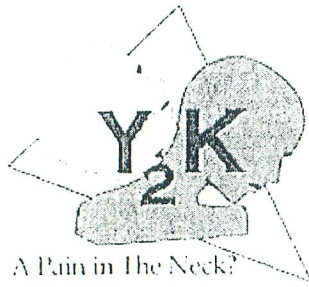
THE MAGAZINE OF  
THE ORTHOPAEDIC SECTION, APTA

VOL. 11, NO. 4

1999



 **APTA**  
American Physical Therapy Association



## Y2K...Pain in the Neck?

12<sup>th</sup> Annual Canadian National Orthopaedic Symposium 2000  
Assessment, Diagnosis and Treatment  
of Whiplash Associated Disorders  
May 12-14, 2000  
Shaw Conference Centre  
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### Key Note Speakers:

#### **Michael Shacklock**

MAppSc, DipPhysio, MAPA,  
MMPAA, MIAASP  
Adelaide, Australia

*Neurodynamics and its Relation to Neck  
Pain*  
*Central Pain Mechanism and Application  
to the Cervical Spine*

#### **Mark Comerford**

BPhy, MCSP, MAPA  
England

*Synopsis of Contemporary Movement  
Dysfunction*  
*Specific Movement Dysfunction as Seen  
in the Post MVA Neck*

### Pre-Symposium Courses:

Michael Shacklock – Pain and the Whiplash  
Neck

Mark Comerford – An Introduction to  
Understanding Movement Dysfunction

The Canadian Academy of Manipulative Therapy  
(CAMT) presents Dr. Paul Hodges –  
Segmental Spinal Stabilisation: Specific  
Assessment and Treatment for Low  
Back Pain

### Guest Speakers:

#### **Yvette Claveau MScPT**

*Scanning Examination – Art or Science?*

#### **Dr. Paul Hodges PhD, Mphly(Hons)**

*Spinal Segmental Stability*

#### **Janet Lowcock BScPT, FCAMT**

*Cervical Manipulation-Current Literature:  
Risk and Screening Tests*

#### **Lorrie Maffey-Ward BMRPT, Mphly, FCAMT**

*Problem Solving and Treatment Plans with the  
MVA Client*

#### **Jim Meadows BScPT, FCAMT**

*Prognostics of MVA Clients*

#### **Dr. Maureen Simmonds PT, PhD**

*Pain-Expanding the Model Beyond the Gate*

#### **Dr. Dan Vincent MD, FRCPC, ABDA**

*Ancillary Techniques for the Diagnosis and  
Treatment of Axial Skeleton Pain*

#### **Kim Weber BScPT, MSc (Neuroscience)**

*Vestibular Rehabilitation Following MVA*

### Post-Symposium Courses:

Michael Shacklock – Neural Mobilization – A  
Practical Approach

Mark Comerford – Movement Dysfunction of  
the Cervical Spine

**For further information regarding symposium, course content or  
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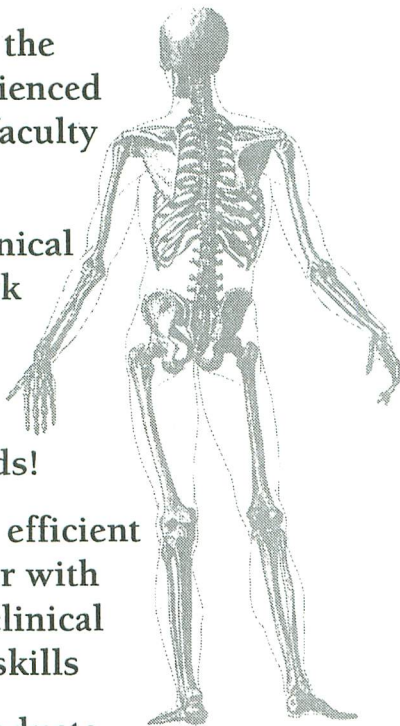
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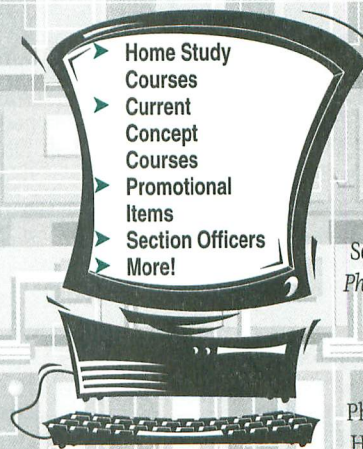
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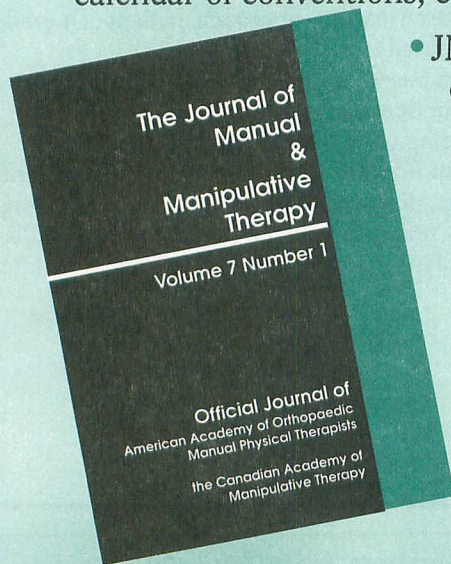
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## Thank You!

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Michael Wooden, PT, MS, OCS - Coordinator, Abstracts and Book Reviews



# ORTHOPAEDIC PHYSICAL THERAPY PRACTICE

## TABLE OF CONTENTS

### IN THIS ISSUE

- 7 Partnerships for Survival: 1993-1999  
*Joe Farrell, PT, MS, FMAAOMPT*
- 11 Preventive Stretching Exercises for the Workplace  
*Lauren A. Hebert, PT, OCS*
- 13 Letter to the Editor
- 14 Continuing Education for Physical Therapist Assistants  
*Jeff G. Konin, MPT, MEd, ATC*

### REGULAR FEATURES

- 5 Editor's Message
- 6 President's Message
- 14 Abstracts and Book Reviews
- 18 Fall Board of Directors Meeting Minutes
- 19 Section News
- 23 CSM Programming
- 26 2000 Poster & Platform Presentations
- 29 Foot and Ankle SIG Newsletter
- 33 Performing Arts SIG Newsletter
- 35 Pain Management SIG Newsletter
- 37 Animal Physical Therapist SIG Newsletter
- 41 Occupational Health SIG Newsletter
- IBC Index to Advertisers

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The mission of Orthopaedic Section of the American Physical Therapy Association is to be the leading advocate and resource for the practice of orthopaedic physical therapy. The Section will serve its members by fostering high quality patient care and promoting professional growth through:

- Advancement of education and clinical practice,
- Facilitation of quality research, and
- Professional development of members.

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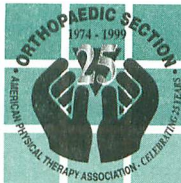
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## Editor's Message



### Time Flies When You're Having Fun

During the editorial process for this issue of *OP*, I realized that it is the last issue of the 20th century. How can it be—the end of a year, much less the end of a century? It seems only yesterday that we were welcoming in 1999—the last year (or so) of the millennium—and beginning our 25th Anniversary Celebration. And now, the year has essentially passed. For school children, one year seems like an eternity, but for adults, it often goes so quickly that there is hardly enough time to make a dent in our “To Do” lists for the year, much less finish them. Fortunately, we can bump many of those items left undone to next year's list. However, some things require regular attention and cannot be bumped into another year's list. Our level of commitment to a particular item is often the deciding factor in determining which items are completed and which are left for another time. We all have to make those decisions based on our individual needs and the needs of our families, businesses, patients, and other involvements. The decisions are often awesome, but are many times somewhat routine. The choices we make can affect one or many. Our commitments are really those things that define who we are. At times, it is important to ask ourselves to whom and what are we committed.

When we evaluate our commitments, we often find that they can be classified into groups—those relating to career, education, family, religion, and volunteer activities. We can assess how and where we spend our time to clarify where our commitments lie. However, giving of one's time does not necessarily mean giving one's commitment. Commitment is defined by Webster as “an agreement or pledge to do something in the future, ...the state of being obligated or emotionally impelled [to a cause].”<sup>1</sup> Commitment implies value. To be truly committed, one has to believe in or value the concept, the activity, the organization, and the people. Then, one must exhibit leadership to see that the goals associated with that to which the commitment is made are actually fulfilled. As Max DePree so nicely said, “The visible signs of artful leadership are expressed, ulti-

mately, in its practice.”<sup>2</sup> How we live, where we spend our time, how we practice leadership all define or expose our “true” commitments.

Joe Farrell's article in this issue causes me to reflect on the level of commitment and the contributions of so many of our members and to recognize the importance of efforts made by each individual. For it is in each of these individual contributions that we have been an effective force in the shaping of not only the history of our Section, but the history of our profession as well. It is this individual and collective commitment that has driven our success. Collectively, we have identified the values of the Section that have guided our plans, decisions, and actions. We have spent time and energy to identify and carry out the goals of the Section, reviewing and updating them on a regular basis. We have celebrated our successes. Artful leadership has been, and continues to be, practiced here.

Thanks to all of you (Members and Staff) who have been committed to the Orthopaedic Section over the past 25 years. Thanks to all of you have demonstrated artful leadership. Welcome to all of you who are just making that commitment.

In this issue of *OP*, our feature articles include the final in our series on the history of the Section by Joe Farrell, one incorporating stretches in the workplace by Lauren Hebert, and one on continuing education for the PTA, by Jeff Konin. In addition, we have an interesting and thought-provoking “Letter to the Editor,” which invites your response. It will be interesting to see how many of you respond to this letter. While the author provides his address, please share your comments in *OP*.

As usual, the SIG newsletters are included in *OP* as well. Along with the news of each SIG, please be sure to read the case studies presented by the FASIG and the APTSIG. These case studies provide descriptions of evaluation and treatment in the respective topic areas and should be helpful to stimulate treatment ideas for practicing clinicians. I am sure that each SIG would welcome discussion of these and other cases within their newsletters.

To catch you up on the news and business of the Section, this issue contains the President's Message, committee reports, and the Fall BOD minutes. The CSM programming schedule is presented for use in planning your participation in CSM events, as well as the inclusion of a comprehensive list of Poster and Platform Presentations. For those reasons, you may want to take this issue of *OP* along with you to New Orleans to help keep you on track.

Also of note, our production schedule for *OP* will continue in accordance with the changes instituted in 1999. Three issues of *OP* will follow our annual meetings (CSM, Annual Conference, and Fall BOD meeting) and will include business of the Section. These will be published in April, August, and December. One special topic issue will be published in June. Therefore, your next issue of *OP* will not arrive until April 2000, following CSM.

In closing, it is important for us to look back on our 25-year history as a Section and see what that history teaches us. It is important for us to recognize that without the commitment of so many individuals, we would be in a very different place now—if we continued to exist at all. It is important that we use what history has taught us to forge our paths in the future. It is important for us to celebrate all that has been accomplished so that we can be motivated to continue. It is important for us, individually and collectively, to recognize individuals who have practiced artful leadership.

Have a terrific holiday season and a great 2000! See you in New Orleans.

### REFERENCES

1. Webster's Ninth New Collegiate Dictionary. Springfield, Mass: Merriam-Webster, Inc.; 1991:265.
2. DePree, M. *Leadership is an Art*. New York, NY: Dell Publishing; 1989:148.



Susan A. Appling, PT, MS, OCS  
Editor, *OP*

# President's Message

## 1999 FALL BOD MEETING

As with the previous 4 years I head home from the Section's Annual Fall Board Meeting optimistic, excited, and a bit overwhelmed. This Fall Meeting was unique in that it was held in Alexandria, VA and one full day was spent with APTA staff. The purpose of our meeting with APTA staff was to become more familiar with APTA's organizational structure, operations, and upcoming major initiatives. Conversely, this meeting was an opportunity for the Section's leadership to share our upcoming initiatives, concerns, and opinions with APTA staff. Being an advocate for Section membership and Orthopaedic Physical Therapy is part of the Section's Mission Statement, and this meeting was a valuable vehicle for this purpose. Besides our BOD meeting another important gathering took place over the weekend. Representatives of the Orthopaedic Section, APTA, American Academy of Orthopaedic Manual Physical Therapists (AAOMPT), Chapters, and the academic community spent a full day generating short- and long-term objectives and strategies related to manual therapy issues and protecting our right to practice. A broad, comprehensive plan was developed which will be presented to the Section membership during the open forum portion of our CSM Business Meeting in New Orleans (February 5, 2000). This joint effort between the Section, APTA, and AAOMPT, if successful, will enhance the practice of Orthopaedic Physical Therapy and will also provide a process template for the Association to utilize when tackling other difficult practice and legislative issues. Strong membership participation will be essential to the success of this plan. Come join us in New Orleans where we will review and revise the strategies. Lastly, during our BOD meeting the 2000 budget was reviewed and approved. Please read the committee reports for details of our 2000 strategic plan. A few of the highlights include:

## Clinical Residencies

As in 1999, money has been earmarked for grants available to clinical residency programs. The grants are to cover the APTA Clinical residency

credentialing application fee. The grants are available on a first-come, first-serve basis. Please see page 42 for information pertaining to the grant application process. In addition to the grant program, money has been allocated to fund a task force whose purpose is to develop an orthopaedic residency curriculum.

## Legislative Fund

Money has been specifically allocated for issues related to the legislative arena. For example, APTA and the Section will train Chapter members to be effective spokespeople and develop materials relevant to manual therapy legislative concerns. 1999 has been a year filled with legislative activity spurred by Chiropractic associations. History tells us 2000 will be no different.

## APTA, Minority Affairs

The APTA Division of Minority Affairs has kicked off a Capital Contribution Campaign with the goal of establishing an endowment fund of \$1,000,000. The Orthopaedic Section has been a long-time supporter of APTA's Minority Affairs initiatives and has pledged a \$5,000 contribution and a portion of the profits generated by our 2000 home study course: Orthopedic Interventions for the Pediatric Patient. If you are interested in contributing to this worthy cause, please contact Johnette Meadows at APTA (800-999-2784 ext. 3143).

## CSM 2000

Please mark your calendars for CSM 2000, which will be held in New Orleans, LA. Our tireless Education Committee has scheduled tremendous programming. The Business Meeting and reception is the opportunity for you to express concerns and share information with Section leadership and colleagues. A forum to meet the JOSPT editorial board has also been scheduled. Bring your Mardi Gras regalia and join us in the Crescent City.

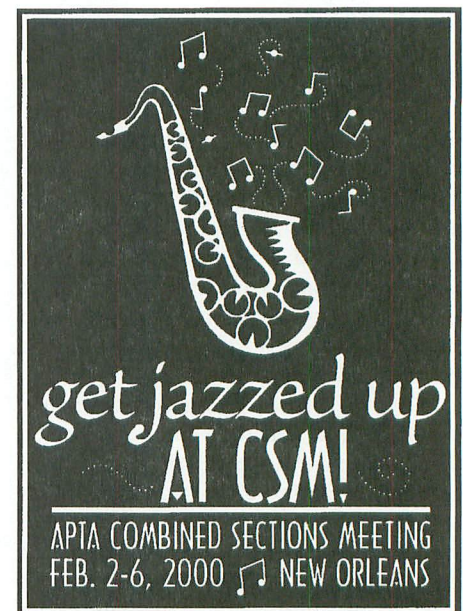
## Etc.

1. Thank you Section office staff, committee chairs/members, and officers for your efforts leading up to and during our Fall BOD meeting.

2. Thank you Frank Mallon and APTA staff for helping make our Fall BOD meeting such a success.
3. A.J.—Great tour of the U.S. Capital building! My patriotic blood has been stirred.



William G. Boissonnault,  
PT, MS, DPT  
President





# Partnerships for Survival: 1993-1999

Joe Farrell, PT, MS, FMAAOMPT

Within a couple of months the Orthopaedic Section will enter the new millennium prepared with a sound strategic plan (developed by our Board of Directors in September 1998) to deal with unpredictable health care and political environments, as well as a turbulent global economy. In the early 1990s, under the leadership of Section President Jan Richardson, PT, PhD, OCS, our Section leaders predicted that our organization required a higher degree of stability to survive any political and health care environment. This notion was passed on to Section President Annette Iglarsh, PT, PhD when she began her tenure in 1992. It became evident that early in the decade of the nineties, our leaders had the foresight to treat the Orthopaedic Section "as a business." A dynamic process of crafting a sound financial plan to keep Section overhead at a minimum, generate non-dues revenue, continue competitive educational programs for our members, and advance our profession publicly and politically, really evolved as the Section membership and its leaders matured.

The health care arena has changed immensely since 1992. Managed care, corporatization of health care, and fierce competition for health care dollars between various health care providers has lead our Section to partner with the American Physical Therapy Association (APTA), American Academy of Orthopaedic Manual Physical Therapists (AAOMPT), Sports Physical Therapy Section, and State Chapters to deal with dynamic changes in physical therapy practice. We have worked together to promote clinical research, education, specialization, publications, and legislative initiatives.

This article is the last in a series of 4 articles which represents an attempt to document important aspects of the rich 25-year history of the Orthopaedic Section. It is very difficult and tedious to record a concise history of any organization; therefore, I choose to highlight important events of the past 6 years relating to partnering for the long-term survival of the Section. Included in this article will be highlights relating to administration, practice issues, publications, **clinical residency** credentialing, the 25th anniversary celebration in Seattle, Washington, and awards. I trust this format

will rekindle the memories of the of long time members and stimulate our new members to become more involved with our great Section.

## ADMINISTRATION OF THE SECTION

Late in 1992 Richardson began to allocate funds for the construction of a new, self-funded office space to house the Section operations. This decision was based on the demands of a growing Section membership and potential office responsibilities that would require expansion of costly rental office space. Enhancing future financial stability was the primary objective for initiating the purchase of land and the eventual construction of a building for the Section. Through astute financial planning of our Finance Committee (lead by Treasurers John Wadsworth, PT, MA and Dorothy Santi, PT), the land and office building would be fully paid for prior to construction.

Four acres of land were purchased in 1995 on a beautiful site overlooking the Mississippi River in LaCrosse, Wisconsin. The long-term plan was to build the Section office on one acre and subsequently sell the remaining 3 acres. Ground breaking for the new building took place on June 12, 1995. Terri DeFlorian, the Section Executive Director, engineered the transition and move into the new office building on November 3, 1995. A local grand opening took place with the Chamber of Commerce present to conduct a ribbon cutting and officially welcome the Section to LaCrosse. Section President Bill Boissonnault, PT, MS, DPT led a group of 40 people from local businesses, hospitals, and the University of LaCrosse.

The official grand opening of the East River Professional Park which houses the Section offices took place on October 5, 1996. Officers (President, Boissonnault; Vice President, Nancy White, MS, PT, OCS; Treasurer, Santi; Directors, Elaine Rosen, DPT, OCS and Mike Cibulka, PT, MHS, OCS) and Committee Chairs were joined by Past Presidents Stanley Paris, PT, PhD, Carolyn Wadsworth, PT, MS, OCS, CHT,



Ribbon cutting ceremony of our new office building, November '95.

and Jan Richardson along with past Vice President John Medieros, PT, PhD. Boissonnault dedicated the conference room to the memory of James A. Gould, PT, MS. George Davies, PT, MEd, ATC, SCS, CSCS President of the Sports Section utilized this occasion to offer historical notes of the Section and how Jim had touched and inspired many lives and careers. Special guest, Debbie Gould, presented the Section with a picture of Jim that is now displayed next to a plaque designating the *James A. Gould Conference Room*. Boissonnault closed the dedication with the following quote: "Today we honor Jim and Debbie Gould by naming this room the James A. Gould Conference Room. But we will honor Jim even more by the decisions that we will make in this room. I believe Jim's presence will help insure that decisions made here will be made in an intelligent, thoughtful, and constructive manner. It is in this way Jim will continue to contribute to the growth and advancement of the Section."

The business of the Section grew from a 1993 year-end budget of \$1,013,828.79 to an annual budget of \$1,565,577.00 in 1999. Since 1995 the Section has contributed \$500,000 to the Foundation for Physical Therapy for clinical research. The Section developed the Clinical Research Grant Program in 1996. The purpose of the program is to fund clinical research studies by members. A total budget of \$30,000 has been allocated for grants annually.

During the autumn of 1996, the Section went on the Internet. Tara Fredrickson, Executive Assistant for the Section, has become our technical wizard. She has developed our **Web page**

and serves as the Webmaster. Recently (October 1999) our Media Spokesperson Network (MSN) has been linked to our Web page to insure rapid deployment of information to our members and the media throughout the country. Terry Randall, PT, MS, OCS, ATC, Public Relations Chairperson, has worked hard with Rick Watson, PT, Director of the MSN, to complete the link between our Web page and the MSN. In April 1999, Randall was named to the APTA Public Relations Advisory Council. This appointment is a vital partnering link to the APTA Public Relations Department.

During 1998 one last administrative event occurred. The Finance Committee advised the Section in 1997 to restructure the office to insure that adequate training of staff occurred, in particular "cross training" of staff. It was felt that cross training was important because of the changes that occurred in the Publications Department in 1998 (see section on publications). DeFlorian led the transition and training, as well as developing Measurable Performance Objectives (MPO), which formulated staff performance evaluations and criteria for bonus/financial advancement of the office staff. The MPO format of staff evaluations were effective in 1998.

## PRACTICE

Considerable change in clinical practice began after the 1992 presidential election. Despite the failed Clinton administration Health Care Reform push to insure every American, the insurance industry independently changed the system. Managed care evolved, which essentially required providers to share in the financial risk of patient care. Acutely aware of the potential for drastic changes in reimbursement, as well as practice infringement, the Council of Section Presidents (1993) formed a committee to monitor clinical practice issues. Scott Stephens, PT, MS (Chair of Orthopaedic Section Practice Committee) spearheaded this committee. This committee would enable Sections and the APTA to coordinate their activities and resources to more effectively deal with health care reform and practice infringement issues. Concurrently, the Orthopaedic Section formed a task force consisting of Stephens, Santi, and Medieros to further study health care reform, reimbursement, and encroachment of orthopaedic physical therapy practice. The findings of this task force were reported at the 1994 Combined Sections Meeting (CSM) Practice Issues Forum which was attended by

30 physical therapists. Of concern at this point in time was the fear that physical therapists would be legislated out of the industry and not be reimbursed for physical therapy services. In addition, changing referral patterns, shifting of private practice into the corporate setting, introduction of private insurance networks, and hospital preferred provider organizations (PPO) changed the manner in which physical therapists practiced on a daily basis.

Secondary to reimbursement issues, the American Chiropractic Association (ACA) in 1996 sought to be included in a managed care organization (MCO) in California. The ACA lobbied the Health Care Finance Administration (HFCA) and essentially won the right to be included in MCOs in the state of California, which meant that the ACA had utilized its financial resources and lobbying skills to provide spinal manipulation in an MCO. Although this ruling only applied in the state of California, the ACA continued a long-term battle to become the primary providers of conservative care for all orthopaedic patients. The desire to become primary providers of conservative care also had been recognized for many years by the Orthopaedic Section leadership. The American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) had been working with the Section leadership since 1992 on practice issues. In 1997 Boissonnault observed an opportunity to develop a stronger partnership between the Orthopaedic Section and the AAOMPT to collaborate on practice issues. The appointment of Steve McDavitt, PT, MS, MTC as Co-chair of the Orthopaedic Section's Practice Committee provided a direct link between the Orthopaedic Section and AAOMPT and Helene Fearon, PT Co-chair provided a direct link between the Orthopaedic Section and APTA's Committee on Practice.

Rosen began organizing and accumulating information relating to manual therapy/manipulation practice and legislative issues in 1995. With the help of numerous individuals and the Practice Committee Chairs (Fearon and McDavitt) the *Compendium of Manual Therapy Practice and Legislative Issues* was compiled as a resource for State Chapters and our members. Included in the Compendium is information that is categorized, alphabetized, and summarized for ease of use to assist the Chapters in protecting the clinical practice of physical therapy.

Since 1994 there have been numerous Practice Issue Forums sponsored by the

APTA and the Orthopaedic Section. In June of 1999, at an APTA/Section-sponsored Manipulation Forum at the APTA Scientific Meeting Exposition (SME), it was reported that 19 State Chapters were dealing with legislative issues relating to a physical therapist's right to utilize manual therapy/manipulative procedures in clinical practice. In the short period of 6 months, legislative battles on the State level relating to manipulation had increased from 6 to 19 states. It was evident that the ACAs plan to legislate physical therapy out of the conservative care market place had gained in momentum. During the Manipulation Forum in June 1999, Boissonnault and Orthopaedic Section Director Joe Farrell, PT, MS, FMAAOMPT voiced an urgent concern that our profession requires a long-term plan of action to protect our clinical practice as outlined in the *Guide to Physical Therapist Practice*, which was published in 1997. Thus Farrell organized a Manual Therapy and Manipulation Strategic Planning Meeting at the APTA National Headquarters in September 1999 that was attended by the APTA Government Affairs staff, Section leaders, State Chapter Presidents, President of AAOMPT, and a group of educators. The outcome of this meeting was positive in that a long-term proactive plan of action was formulated to strongly address manipulation issues and any other professional encroachment problems that may arise in the future. The plan of action will be presented to the APTA BOD for consideration in November 1999.

Clinical practice since 1993 has become more specialized. In 1993 the first Special Interest Group (SIG), Industrial Physical Therapy, became part of the Section. In 1995, the Industrial Physical Therapy SIG, changed its name to the Occupational Health Physical Therapists SIG (OHPTSIG). In 1996 the idea for the "Compendium on Occupational Health Physical Therapy" was conceived by the OHPTSIG. The development of the Compendium has been a joint venture of the Section, APTA, and OHPTSIG. The OHPTSIG hopes to complete the Compendium for distribution by the end of 1999.

Other SIGs developed through a mechanism whereby interested physical therapists formed a roundtable group. When the roundtable group was able to acquire 250 signatures of interested physical therapists, then the roundtable was eligible to become a SIG upon approval of the Section BOD. Special interest group status provided a "house" for

physical therapists with a special interest to meet, confer, and share educational ideas. In 1999, there are 5 SIGs serving the needs of membership: OHPTSIG, Performing Arts SIG, Foot & Ankle SIG, Pain Management SIG, and the Animal Physical Therapist SIG. The AAOMPT remains an external organization to the Section (not a SIG) which communicates regularly on practice and residency credentialing issues through an official liaison from the APTA and the Section. In retrospect, the SIGs have contributed significantly to the programming for the annual Combined Sections Meeting and practice issues.

## PUBLICATIONS

During the summer of 1993, the *Journal of Orthopaedic & Sports Physical Therapy* (JOSPT) editor Gary Smidt, PT, PhD reported that after 14 years JOSPT had joined 3,055 international journals indexed by the National Library of Medicine (Index Medicus). The great accomplishment under the direction of Smidt enhanced the worldwide acceptance of JOSPT.

In June 1996 at the APTA Annual Conference in Minneapolis, the Orthopaedic and Sports Sections received a pessimistic financial report from the publisher (Williams & Wilkins) regarding JOSPT. The goal of the Orthopaedic and Sports Sections was to continue publishing a quality journal without increasing the cost to Section membership. Therefore, Boissonnault and Davies and their respective BODs issued a request for proposals for publication of JOSPT. Seven proposals to publish the journal were received by the January 15, 1997 deadline. Davies, Boissonnault, and an independent consultant reviewed the proposals. In May 1997 the Executive Committees of the Orthopaedic and Sports Sections narrowed the field of potential Journal publishers to two: Williams & Wilkins and Allen Press, Inc. After extensive negotiations, Allen Press, Inc. was selected to publish JOSPT. With the Williams & Wilkins contract ending December 31, 1998, the transitioning of publishing responsibilities began in July 1998. The financial terms of the contract will allow the Sections to provide the adequate resources for continued growth of JOSPT.

Concurrently while negotiations for a new publisher were ongoing, the Editor-in-Chief Search Committee (Dan Riddle, PT, White, Santi, Davies, and Mark DeCarlo, PT, MS) interviewed 5 candidates. After considerable deliberation, the search committee selected Richard

DiFabio, PT, PhD from the University of Minnesota as the new Editor-in-Chief of JOSPT in the late spring of 1998. DeCarlo (current President of the Sports Physical Therapy Section) and DeFlorian administered the move of the JOSPT office from Iowa City to the Section's LaCrosse office building. In addition, DeCarlo set up the BOD for JOSPT and with DiFabio's assistance set up the first meeting on July 7, 1998 in the new editorial office with Allen Press. DiFabio selected a new editorial board for the journal that officially met in La Crosse with the Section's BOD on September 25-26, 1998. The first issue under DeFabio's leadership occurred in January 1999. In sum, during 1998, the Section transitioned from one publishing company to another, one Editor-in-Chief to another, and moved the Journal office from Iowa City to LaCrosse. This would not have been possible without the sound financial stability of the Section that had commenced during Presidents Richardson's and Iglarsh's tenure in the early 1990s and the expertise and negotiation skills of Presidents Boissonnault and Davies.

Other important components of publishing relate to contracted journals, *Orthopaedic Physical Therapy Practice*, and Home Study Courses. The Section continues to operate "as a business" to maintain financial stability and to contribute hundreds of thousands of dollars to clinical research and practice-related issues. Due to our work in publications, the Section is earning nondues revenue. For example, the Section's Managing Editor, Sharon Klinski, manages a significant workload. Contracted journals Klinski manages include: *Cardiopulmonary Physical Therapy Journal*, *Issues on Aging*, *Neurology Report*, *Oncology Rehabilitation*, and the *Section on Women's Health Journal*. In addition, she is also working consistently with the following newsletters: *GeriNotes*, *Hand Prints*, and *Highlights of the Section on Women's Health*.

Since the evolution of *Orthopaedic Physical Therapy Practice* (OP), Klinski has worked as the Managing Editor for OP Editors Medieros, Jonathan Cooperman, PT, JD, OCS, and our current OP Editor, Susan Appling, PT, MS, OCS. Historically, the cover of OP changed format and color in the winter of 1993 and again in the winter of 1997. The 1997 issue of OP denoted the publication as *Orthopaedic Physical Therapy Practice: The Newsletter of the Orthopaedic Section, APTA*. The January 1999 (Vol. 11, No. 1) issue of OP again changed in

terms of title: *Orthopaedic Physical Therapy Practice: The Magazine of the Orthopaedic Section, APTA*.

The Home Study Course (HSC) series has evolved considerably since Kent Timm, PT, PhD, OCS, SCS, ATC, FACSM was the first editor of this popular educational offering for the Section's membership. Current Home Study Course Editor, Wadsworth has provided an eclectic offering of HSC programs ranging from occupational health, orthopaedic/sports-related topics, and medical topics pertaining to pharmacology and diagnostic imaging of bones and joints. Over 2500 registrants have taken advantage of the HSC to earn CEUs and advance professional knowledge in a cost-effective manner.

## CLINICAL RESIDENCY CREDENTIALING

Accreditation of Clinical Residency Programs was initiated with the formation of the AAOMPT in 1992. The AAOMPT worked in collaboration with Section Presidents Richardson and Iglarsh in the early 1990s to formulate a plan to accredit residency programs. In March 1994, Carol Jo Tichenor, PT, MA chaired the original 8-member clinical residency accreditation task force appointed by the APTA BOD. Starting from scratch, this group under Tichenor's leadership laid down the foundation for the current process and documentation. The popularity of this mode of advanced clinical training was evident when 400 physical therapists attended a Clinical Residency Open Forum held in Reno, Nevada during the 1995 Combined Sections Meeting. That same year, 400 physical therapists completed a clinical residency survey developed by the original task force of 1994. In 1997, 180 physical therapists reviewed the residency program credentialing guidelines proposed by a third task force chaired by Boissonnault. The feedback received resulted in significant modifications in the document that went to the APTA BOD in November 1997.

The APTA BOD at their November 1997 meeting agreed to implement a postprofessional clinical residency credentialing process, beginning in January 1998. To monitor this process, a 5-member committee on clinical residency credentialing was appointed. The APTA BOD selected Cibulka, Jay Irragang, PT, Joe Godges, PT, MS, OCS, Colleen Kigin, PT and Toby Long, PT to serve on this important committee. The credentialing guidelines provide requirements for

those interested in developing a post-professional clinical residency program in any specialty of physical therapy.



**Past Orthopaedic Section Presidents: Stanley Paris, Dan Jones, Duane Saunders, Carolyn Wadsworth, Jan Richardson, Annette Iglarsh, and Bill Boissonnault.**

This process will be dynamic and require nurturing to succeed. Richardson was part of all 3 APTA clinical residency task forces, therefore, she was a constant thread linking efforts from 1994 to 1997. Her persistent support for this concept of advanced clinical training was and remains vital to the successful outcome of the credentialing process.

At the Seattle CSM the Orthopaedic Section BOD agreed to allocate \$10,000 during 1999 for clinical residency program grants. The grants are designed to cover the APTA credentialing application fee, which ranges from \$1500 to \$2500 depending on the number of residents in the program. Also during 1999, the Orthopaedic Specialty Council recognized clinical residency training as one avenue to become a clinical orthopaedic specialist.

### THE 25TH ANNIVERSARY CELEBRATION

Farrell, Wadsworth, and Linda Weaver (Executive Secretary of the Section) began organizing the archives of the Section's history according to the "Guidelines for the APTA Component Archives" in January 1998. Documentation included minutes from meetings, bylaws, public relations materials, publications from the beginning of the Section's history, home study courses, and lists/photos of all Section Award recipients. Photos were organized and stored at the Section's office. At the 1998 BOD Fall Meeting in LaCrosse, Paris, White, Ann Grove, PT, Santi, Farrell, Wadsworth, and Weaver cataloged hundreds of Section photos. Farrell videotaped Paris, Grove, and Santi who gave their impressions of the initial meeting of the North American Academy on Manipulative Therapy in August of 1968.

The 25th Anniversary CSM Meeting was highlighted by quality clinical and educational programming. The Section's Education Committee, chaired by Lola Rosenbaum, PT, MHS, OCS contributed an immense amount of energy in planning not only the education program for CSM,

but the entertainment for the 25th celebration.

Saturday evening started with a packed house to honor the Section award recipients that included Santi (Paris Distinguished Service Award), Christopher Powers, PT, PhD (Rose Excellence Award in Research), and Walter Jenkins, PT, MS, ATC (Award for Excellence in Teaching Orthopaedic Physical Therapy). Following the Awards ceremony, hundreds of members spent a wonderful evening enjoying great entertainment that included a comedian and a little gambling at a casino night. Weaver was busy most of the night expanding our Section's archives by photographing officers, committee chairs, and past presidents who were present at the celebration. The fast-paced evening capped a great 25th anniversary celebration of the Orthopaedic Section.

### SUMMARY

The Vision of the Orthopaedic Section that follows was crafted by the current Section Board of Directors during a strategic planning meeting in September 1998: "The Orthopaedic Section is the leader in advancing orthopaedic physical therapy practice through professional development and increased involvement of our members. The Section leads through bold and innovative education, practice, and research initiatives while maintaining fiscal and ethical accountability."

The period between 1993 and 1999 has provided innovative education through CSM programming and Home Study Courses, which are very popular amongst our members. The Section has shown fiscal responsibility by purchasing land in LaCrosse, Wisconsin, building the East River Professional Building that now houses the Section office and JOSPT, changing JOSPT publishers, offering numerous Home Study Courses, and publishing journals to provide long-term financial stability for our Section. Our commitment to research since 1993 is incredibly strong in that the Section has

donated over \$500,000 to the Foundation for Physical Therapy for clinical research and remains very committed to clinical residency training by creating a grant program for residency programs who desire to participate in the APTA Credentialing process. The Section is a strong advocate of protecting the clinical practice of physical therapy as exemplified by its partnering with the APTA, AAOMPT, and other APTA Components to be a "watch-dog" for changes in reimbursement and practice infringement.

Future challenges that face our members include experiencing unemployment during 1999 for the first time in physical therapy, attempting to secure direct access, and recognition of our ability to diagnose by insurance carriers and legislative bodies. Partnering with other component organizations within our profession has enabled us to win many legislative battles since 1993. With a decrease in APTA membership this year, however, perhaps the biggest challenge in the immediate future is increasing our membership to strengthen our profession and our ability to remain a strong political power within the medical and legislative communities. Historically our profession has found a way to succeed and has found ways to survive. Our Section is confident that we will meet the challenges as we approach the millennium.

### Awards Summary (1993-1999)

Paris Distinguished Service Award: 1995, Joe Farrell; 1997, Rick Ritter; 1998, Carolyn Wadsworth; 1999, Dorothy Santi

Rose Excellence Award for Research: 1993 & 1994, Anthony Delitto; 1995, Karen Hayes; 1996, Lynn Snyder-Mackler; 1997 Richard DiFabio; 1998, Diane Jette; 1999, Christopher Powers

Award for Excellence in Teaching Orthopaedic Physical Therapy: 1995 Sandy Burkhardt; 1996 Phil McClure; 1997 Tom McPoil; 1998, Paul Howard



Joe Farrell, PT, MS, FMAAOMPT is currently serving as Director of the Orthopaedic Section, APTA and is owner of Redwood Orthopaedic Physical Therapy, Inc. in Castro Valley, California.

# Preventive Stretching Exercises for the Workplace

Lauren A. Hebert, PT, OCS

Work-related musculoskeletal disorders of the upper quarter and lower back are epidemic in today's workplace, accounting for the majority of Worker Compensation claims and costs. Physical therapist designed stretching exercise programs for the workplace have resulted in reduced injury claims, lost workdays, and Worker Compensation costs. For such programs to succeed, however, a number of rules must be followed and certain challenges overcome.

Industry has relied primarily on ergonomists to redesign the workplace to reduce the required physical demands of work. This approach succeeds where injuries have been the result of faulty work design and where affordable ergonomic modifications are available. But most musculoskeletal disorders have significant causality from worker behaviors, established posture habits, flexibility, and fitness-for-work deficits that are not amenable to ergonomic modifications. For many at-risk workers poor job design is either not the issue or, if it is, redesign alternatives may not exist. How may we protect these workers? Job task rotation, sit-stand work posture options, and preventive stretching are excellent protection strategies for these people.

Stretching programs have demonstrated exceptional success for many workplaces. But formidable challenges, mostly political and attitudinal, must be overcome. Workers do not initially like the idea, as they fear they will look funny doing exercises on the job. Supervisors resist the idea on the fear that productivity will be compromised. Managers fear upsetting delicate employee relations and morale. Even most OSHA officials resist the idea, citing lack of evidence of exercise effectiveness and concern that exercise programs "let management off the hook" for responsibility for ergonomic improvements to the workplace. These are all legitimate concerns we must respect.

Workers are correct: they will look funny doing stretches on the job. We can grant them that objection. But **productivity will not** be harmed with properly designed, properly implemented stretching programs. Our experience at hundreds of workplaces has shown pro-

duction actually **increases** with the exercise program we will describe here, presumably due to reduced worker fatigue and improved work performance. Success of a stretching program relies critically on a quality-training program by a skilled physical therapist instructor. The structure of the training program must be sensitive to employee relations' issues and other management concerns.

We will describe the stretching program that is the heart of the IMPACC Neck-Arm CTD School we designed and presented to over 450 workplaces since 1980. Workplaces that gave us access to their injury data experienced an average 72% reduction in lost workdays in the 12 to 24 month period following

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Work-related musculoskeletal disorders of the upper quarter and lower back are epidemic in today's workplace, accounting for the majority of Worker Compensation claims and costs.

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implementation of our program. This program introduces numerous prevention tactics into the workplace: ergonomic design suggestions, work task rotation, improved seating, improved injury case management. But the stretching program was the heart of it all, especially when we realized the limited applications of ergonomics, seating, and job rotation strategies. Stretching could be applied anywhere on any job as the ultimate safety net.

## RATIONALE

Why stretches in the workplace? If we define upper quarter CTD problems (eg, tendinitis, carpal tunnel syndrome) as primarily **nutrient pathway disorders**, we will see a clear mechanism of injury and, thus, the strategy of preventive stretching. If we also realize sustained

posture (prolonged sitting or standing) nearly always accompanies repetitive task jobs, we may consider proximal posture stresses and, especially, a degree of thoracic outlet-inlet compression as significant mechanisms contributing to CTD problems distally. The damage produced by these processes is potentially quite reversible with frequent stretching throughout the workday.

The IMPACC stretching program consists of:

1. Chin tucks: not aggressive axial extension but, rather, bringing the head-neck as tall as possible for 10 seconds. This is to correct much of the stresses of forward head posture (so very common to these types of jobs).

2. Scaleni stretching: done very gently so as not to irritate sensitive tissues. The worker holds the shoulder girdle depressed with the other hand while tipping the head and neck into full contralateral sidebending, with slight rotation toward the stretched side to assure scalenus anticus and medius are on stretch for 10 seconds, each side once.

3. A Jacobsen's relaxation maneuver: shrug shoulders with clenched arms and hands as you inhale for 3 seconds, followed by exhale and fully relax for 5 seconds, twice.

4. Codman's: stand to dangle one upper extremity and, in a relaxed manner, swirl it around 10 circles each way.

5. Extensor Carpi Radialis (ECR) stretch: for tennis elbow. Hold arm extended at elbow, fully flex at wrist, tip hand outward toward little finger. Stretch 10 seconds.

6. Wrist stretch: stretching contents of the carpal tunnel. Hold arm palm up with elbow straight. Tip hand backward. Give it some gentle overpressure in this direction with the other hand 10 seconds.

7. Standing back bends: We cannot pass up the opportunity to give the low back some brief period of extension, in light of the predominance of flexion demands at the low back, especially on sitting jobs. Sitting hamstring stretches may be added for bending, lifting, sitting, standing jobs. Sitting low back flexion may be added to jobs with standing or overhead work.

This entire collection takes less than

2 minutes to complete. But we recommend, strongly, these be done hourly. The objective is brief but frequent stretch breaks to restore working tissue perfusion; improve nutrient pathway.

We accept that 10 seconds per stretch is not consistent with findings that 30 seconds is likely the ideal stretching time for lengthening. But lengthening is not our objective. We simply seek some relaxation of contractile structures and associated passive structures undergoing tension or compression, so as to re-establish or improve tissue perfusion. Thirty seconds per stretch is too prolonged to be acceptable to the workplace and may be too stressful to some workers with existing problems.

We need to offer as concise a package of exercises as possible to gain management's willingness to allow the exercises, as well as to maximize accuracy and cooperation among workers. This is critical. Too many exercises simply will not allow any exercises to occur.

#### PREREQUISITES

Critical rules must be followed for an exercise program to succeed. First, the exercises must be designed by a professional physical therapist, preferably after inspection of the workplace to ascertain typical work demands and worker risks. Next, exercises must address proximal posture demands, to reverse thoracic outlet-inlet and forward head posture stresses, rather than focus exclusively on distal movement demands. Next, the exercises must be brief enough to be acceptable to the workplace. Then, training of managers and supervisors must come before training of workers, to maximize management commitment. This point is critical to success. Finally, management should make stretching more or less mandatory. Some form of accountability is essential. We simply ask management, "how much money do you want to save?" That defines the level of exercise enforcement from management.

Stretching exercises should not be injected into the workplace as a stand-alone isolated prevention tactic but, rather, as a part of an overall structured program addressing the full scope of injury management. Our Neck-Arm CTD School is the vehicle by which we deliver the stretching program to the workplace. Simply coming to the workplace and teaching workers a generic set of exercises is not advisable. Exercises

should be customized to the workplace; workers should feel the instructor knows their work demands; supervisors and managers must be educated and committed; workers should be checked for safe exercise performance, with opportunity to interact with the physical therapist.

A larger discussion of the context of these exercises within a comprehensive prevention program may be seen at our web site: [www.smartcarept.com](http://www.smartcarept.com), along with extensive literature abstracts, references, and client company outcomes. This site extends this discussion beyond the confines of available space in this

article. Those without Internet access may contact the author for paper copy of this.

Other web sites to explore:  
[www.smartcarept.com](http://www.smartcarept.com)  
[www.impaccusa.com](http://www.impaccusa.com)  
[www.ergoweb.com](http://www.ergoweb.com)  
[www.carrpt.com/ergo.html](http://www.carrpt.com/ergo.html)  
[www.oshe.gov](http://www.oshe.gov)

Lauren Hebert is currently at SmartCare Physical Therapy in Dixfield, Maine.



## MAKE THE MOST OF YOUR CHARITABLE GIVING!

Recent studies show that people make charitable contributions primarily because they want to make a difference. But whether they support educational foundations, medical research, or humanitarian programs, 95% of contributors feel they lack the knowledge that is essential to maximize the effectiveness of their gifts.

Like most people, you're probably familiar with donating cash and tangible goods such as clothes, furniture, and food. But you may be less familiar with other avenues for giving that could provide even more benefits, to you as the giver, as well as to the charities you choose.

One increasingly popular method for donating to charity is through a charitable trust. A charitable trust not only provides a sizable donation to a charity you choose, but gives you a current income tax deduction, income for yourself or beneficiaries, and provides a way to avoid paying capital gains taxes on highly appreciated property. A charitable trust can also solve various estate planning problems.

There are several different types of trusts available and one can be tailored to suit your individual needs and goals. For additional information on how to make this work for you, contact Terri DeFlorian of the Orthopaedic Section.

## Letter to the Editor

I had a bad dream last night. A nightmare really. I dreamed that I was treating patients in an impairment-based physical therapy world...

The trend these days appears to be towards the idea that as a physical therapist, I treat key impairments. This implies that given the medical diagnosis, I am skilled to do my evaluation to find the key impairments. Then I treat these impairments in order to improve impairments, disabilities, and handicaps. I do not pretend to know about other physical therapists, but I do know that when I see the medical diagnosis of low back pain or mechanical low back pain, that my thought processes are very different from the overly simplistic notion to find and treat key impairments. These impairments, along with the patient's history, signs, symptoms, and goals are what lead me to what I consider to be a physical therapy diagnosis.

For the patient with the medical diagnosis of low back pain, my physical therapy diagnosis might be, among others, postural syndrome, stenosis syndrome (a flexion treatment category), disk syndrome (an extension treatment category), sacroiliac dysfunction, instability, hypermobility syndrome, an erector spinae muscle strain, or a lumbar ligamentous sprain. Each of these patients might have the same impairments, disabilities, and handicaps. However, I would treat each patient differently, with different expected outcomes and prognoses.

Twenty years ago, you (not *we* because I've not been in practice for quite that long) treated low back pain (a sensory impairment as well as a medical diagnosis) truly as an impairment level diagnosis. You treated with hot packs, TENS, ultrasound, and massage in order to decrease the sensory impairment, pain. Interestingly, most physicians continue to treat at this level by prescribing pain relievers and anti-inflammation drugs. Do you still treat this way?

With the coming of Williams flexion exercises and the subsequent McKenzie extension exercises, we (I now include myself) had to at the very least add some treatment-based diagnostic categories. We had to decide which patients did better with which type of exercises. With the addition of the ever popular stabilization exercises, coordination ex-

ercises, and abdominal strengthening exercises the number of diagnostic categories must continue to increase. Throw in other interventions (eg, postural exploration treatments, body mechanics training, joint and soft tissue mobilization, biomechanical evaluation, and neuromodulatory techniques) and we must continue to increase treatment categories for each technique. Alternately, we can begin to recognize clusters of impairment, signs, and symptoms that we might call syndromes. We must do this because our physical therapy diagnosis drives our physical therapy interventions and our expected outcomes. How many of us are frustrated because the insurance carrier only recognizes "low back pain" diagnosis and so will pay for whatever they believe to be the proper number of visits for a "low back pain" patient.

In the impairment-based world, all of our research continues to be on how our physical therapy interventions affect the impairments, disabilities, and handicaps of a subject population consisting of patients with a medical diagnosis (like low back pain) as diagnosed by a M.D. I strongly believe that the reason that various physical therapy interventions have not been shown to be helpful in controlled studies is that these studies are based on medical diagnoses and not on physical therapy diagnoses. The subject populations are not homo-

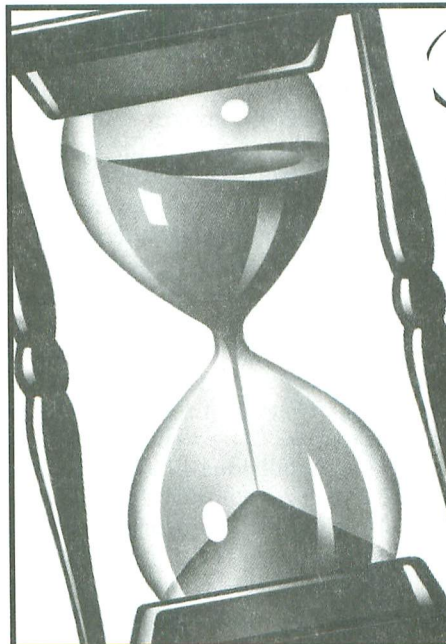
geneous enough to show the beneficial effects. By the way, there are some physical therapists who should be applauded for publishing research on the effects of a specific treatment on a treatment-based diagnostic category.

For the knee, do you treat anterior knee pain, patellofemoral dysfunction, or patellofemoral dysfunction secondary to quadriceps weakness vs IT band tightness vs hyperpronation syndrome? How would you treat each of these patients if they came into your clinic? Are you capable of making a distinction between these diagnoses? Would it make you feel better if we named it patellofemoral movement disorder?

I do not treat key impairments under a medical diagnosis. I treat an orthopedic physical therapy diagnosis. This does include, but is not limited to, impairments. We need to stop this madness and set up a task force on orthopedic physical therapy diagnosis. If we continue along this path, we will be limiting ourselves in more ways that we could ever dream.

Comments? Please contact Rennie at [renniemtp@earthlink.net](mailto:renniemtp@earthlink.net). *Orthopaedic Practice* is interested in your response as well; please send your comments to [sklinski@centurytel.net](mailto:sklinski@centurytel.net).

Rennie Maeda, MPT



# Note!

Be active in the  
Orthopaedic Section!

Please remember to return  
your ballot postcard by  
December 31st!

*Your vote counts!*

Slate of Candidates includes:

Director: Joe Farrell

Nominating Committee Member:  
Bill O'Grady & Spencer Blackie

# Continuing Education for Physical Therapist Assistants

Jeff G. Konin, **MPT, MEd, ATC**

*This column is geared toward the physical therapist assistant and is being coordinated by Gary Sbankman, OPA-C, PTA, ATC.*

As the field of physical therapy continues to celebrate milestones, the physical therapist assistant has found himself placed in an ever so increasingly important role, ranging from clinical responsibilities to administrative duties. This emergence of greater dependency upon the PTA to play a vital role in the daily operation of the physical therapy delivery system challenges the PTA of the future to become ever so competent in the current and evolving techniques related to the delivery of physical therapy related services.

Though the first PTA school opened its door over 30 years ago, continuing education designed solely for PTAs has lagged well behind. Much debate has been documented in various physical therapy journals and magazines regarding whether or not physical therapists and physical therapist assistants should in fact be a part of the same continuing education class. It is this author's opinion that this debate has relevance; however, the content itself and the level of which it is being taught plays a vital role in the decision making process.

As appropriate courses become more available to meet the needs of the roles and responsibilities of today's PTA, it becomes imperative that each and every PTA take advantage of these learning opportunities. The dilemma that currently exists is that there are so many courses to choose from. The purpose of this article is to provide guidelines for choosing a continuing education course for the PTA.

It goes without saying that there are some basic characteristics of a course being offered that involve simple decision making skills. These include the topic of the course, the location where it is being offered, the cost of the course, and the date when it is being presented. All of these issues are of concern to the continuing education provider from a marketing perspective as they compete for customers. However, although these are important elements for a PTA to consider from a realistic viewpoint, they

should not be used as the sole determinants for attending a particular course.

Perhaps one of the most important assessments should be that of the speaker's credentials. More and more individuals are participating in the delivery of continuing educational information without merit or prescreening of their capabilities. That is, these speakers are primarily giving you their viewpoint without much consideration to scientific rationale and current evidence available. It is possible that these individuals fall into the category of "having a little knowledge is dangerous" and therefore present information that may appear new and intriguing to them, but in fact is not so stimulating to the experienced PTA.

It is also essential whether or not the presenter(s) has (have) a knowledge of PTA education and continuing education. It is a well-known fact that there is a clear and distinct difference between the educational foundation of a PT and a PTA, and thus the instructor's sensitivity of the "working world" for the PTA. From personal experience, I believe that presenters who have experiences teaching in PTA curriculums and those who work directly and collaboratively with PTAs on a daily basis appear to relate best to PTA participants.

The sponsoring agency of the course should also be taken into consideration. Some companies offer many more courses than others. However, the number of courses a company offers on a yearly basis should not be the determinant of the quality of information that is presented. If you are not aware of the reputation of the organization sponsoring a course you should make every attempt possible to learn more about them. You may contact them directly, ask other individuals if they are aware of the company's reputation, or even ask the company itself for referrals from past participants. Do your homework, as too many individuals have been dissatisfied with enrolling in a course that lacked a credible sponsoring agency and/or presenter.

It is always a wise choice to find out ahead of time what the goals of the

course are and who the intended audience is meant to be. It is not uncommon to enroll in a course only to find out once the course has begun that it really wasn't what you expected. Receiving a statement of course goals, which is often times included in course brochures, can alleviate this problem. Remember, if a course states that it is intended for a broad audience then it is less likely that the majority of the information presented may be directly applicable for you as a PTA. In fact, if a course specifically notes that it is intended for PTs, then it is highly unlikely that you as a PTA will feel comfortable with the breadth of information presented in the program. It is also possible attending courses with other professionals may create a sense of intimidation or uncertainty, which in turn can adversely affect your learning process.

One final note is that if you practice in a state which requires documentation and approval of attendance at continuing education courses, be sure to verify with the sponsoring agency that the course in which they are providing is in fact preapproved by the appropriate body. If a course is not preapproved, you take a risk on submitting a request for approval after the course has taken place and could possibly be denied credit. Though there is no denying the fact that you attended, nor that you were able to learn relevant information, the decision making body may not see the course as being appropriate for any number of reasons that could range from course content discrepancies to incomplete applications.

The high number of continuing education courses that are currently available for PTAs provide for unprecedented opportunities. It is up to you to determine and decipher through those that are more reputable. As a PTA, don't settle for anything less than a high quality educational program. You deserve it!

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Jeff Konin, **MPT, MEd, ATC** is an Instructor for the PTA program at Delaware Tech and President of Coastal Health Consultants, a continuing education seminar company.



# Book Reviews

Coordinated by Michael J. Wooden, PT, MS, OCS

Rice VJB. *Ergonomics in Health Care and Rehabilitation*. Boston, Mass: Butterworth-Heinemann; 1998: 369 pp.

Valerie J. Berg Rice, PhD, OTR/L, CPE, FAOTA has compiled a timely and comprehensive compendium of ergonomic topics that presents a systems approach to the integrated practice field of human factors ergonomics. Ergonomic principles are effectively distilled into task analysis, design, and testing/evaluation areas. The introduction concisely defines current and new terminology related to this expanding field of practice, outlines the evolution of health care and rehabilitation ergonomics, and clearly explains human factors ergonomics from a systems perspective. Through combined efforts of Berg Rice and contributing authors, the basic premises of ergonomics are established and are evident as a common thread through this compendium.

This book contains excellent contributions from 28 professionals, some of whom consider themselves ergonomists, others who use ergonomic techniques within their specialty scope. Their backgrounds are diverse, including health care administration, industrial design, human factors ergonomics, industrial engineering, law, medicine, physical therapy, occupational therapy, psychology, and rehabilitation engineering. The authors address diversities of ergonomic practice through pertinent case studies with practical ergonomic solutions from each individual's professional and educational viewpoint. Sections II through VI of the text identify 5 areas of ergonomic specialty practice on which the chapters expand:

1. Ergonomics to fit an individual with a disability.
2. Ergonomics for special groups or categories of people.
3. Industrial/musculoskeletal ergonomics.
4. User centered equipment design.
5. Clinical ergonomics and the Americans with Disabilities Act.

Each chapter of the text conveniently begins with a list of learning objectives, followed by key words and an abstract of information found within that chapter. This format makes this compendium

user friendly for the experienced clinician and a useful learning tool for the student. The intent of this book is to offer guidance for field application of human factor ergonomics in the health care and rehabilitation realm. In each author's chapter, practical information is well presented in an organized text, pictorial, table, and appendix format, assisting clinicians immeasurably in effective practice application. Appropriate research data is presented which augments didactic clinical findings. Finally, a chapter conclusion section summarizes important points, followed by a complete reference list to promote further study on a given topic or topics. Appendix guidelines and evaluation templates are quite helpful and immediately practice applicable.

Valerie J. Berg Rice is to be complemented on presenting one of the first and best integrated texts addressing a variety of ergonomics issues as related to the practice of human factors ergonomics in health care. Practicing clinicians stand to gain valuable and timely knowledge from each author's unique perspective. Additionally, *Ergonomics in Health Care and Rehabilitation* will likely become a preferred text in ergonomics curricula in both university-based and postgraduate continuing education settings.

Bobbie Kayser, PT



Goldstein T. *Geriatric Orthopedic Rehabilitative Management of Common Problems*, 2nd ed. Gaitersburg: Aspen Publishers; 1999: 401 pp. hardcover, illus.

The second edition of *Geriatric Orthopedics* by Trudy Goldstein attempts to provide the physical therapy professional with an overview of geriatric rehabilitation management. According to the author, "This new edition has been written to help the therapist provide more efficient services while maintaining quality of care." Toward that end, this second edition includes many revisions as well as significant new contributions. Revisions include modified treatment programs and descriptions of surgical techniques. In addition, more

photographs, tables, and illustrations have been included. New contributions include a section on documentation tips, information on soft tissue injuries, product information sources, and a chapter on balance interventions for the orthopaedic patient.

Chapter one of *Geriatric Orthopedics* discusses various theories of aging, the process of normal aging, and the effects of hypokinetics and exercise in the elderly. Chapter 2 describes basic evaluation and treatment strategies for the geriatric patient. Chapters 3 through 16 focus on the specific joints of the body, with 2 chapters devoted to each joint. For each joint, there is one chapter on anatomy and kinetics and another on the treatment of common problems such as fractures, arthritis, soft tissue injuries, and arthroplasties. The final chapter of the book delivers a well-written comprehensive review on balance and treatment of balance dysfunction. An interesting and valuable addition found at the end of each treatment chapter is a section on documentation tips. This section addresses several components of documentation such as writing referrals, home exercise programs, patient safety, goal setting, skill documentation, "buzz words," and the legal record. While this information may be easier to access if it was provided in an exclusive chapter or appendix, it is a worthwhile addition to the text.

The organized format and practical manner in which *Geriatric Orthopedics* is delivered makes it an excellent source of reference for the practicing clinician or student. The chapter on anatomy and kinetics enable the reader to apply biomechanical and anatomic principles and rationale to rehabilitation regimens. The numerous exercises and illustrations provided throughout the text allow the physical therapist to readily apply the information presented. The authors use of sources such as Kisner and Colby, McConnell, Sahrman, and Travell provides the reader with a useful variety of exercises and treatment strategies.

One technical flaw of *Geriatric Orthopedics* which should not be overlooked involves the table of contents. Many of the page numbers are incorrect. While this should not diminish the use-

fulness of the text, it does make referencing the material slightly less convenient.

Overall, Goldstein's *Geriatric Orthopedics* succeeds in providing the reader with an in-depth and up-to-date resource on management strategies for common geriatric orthopaedic problems. Although this book would be most beneficial for the practicing clinician, it will also serve as a valuable reference for the physical therapy student who is attempting to gain more knowledge in the area of geriatric orthopedic physical therapy.

*Phyllis A. Clapis, PT, MS, OCS*



**Konin JG. *Practical Kinesiology for the Physical Therapist Assistant*. Slack; 1999: 212 pp, soft cover, illus.**

This volume is, indeed, a practical resource for the physical therapist assistant. The editor has assembled 7 contributors, with varied background and experience, to develop a basic yet thorough introduction to kinesiology.

The 12 chapters in the book, which is accompanied by a laboratory manual, pose objectives and questions designed to promote practical thinking among PTA students. Understanding how the human body moves is vital to problem solving in the clinic, and this book promotes and facilitates the PT/PTA co-treatment approach.

The first few chapters lay groundwork for the PTA student, covering such topics as terminology, biomechanical principles (including the physics of body movement), joint structure and function, and tissue repair.

The remainder of the book is more clinical and is very well organized. Each chapter contains a basic review of the anatomy and arthrokinematics of peripheral and spinal joints. The section contains chapters on the upper and lower extremities, and each presents a summary of common injuries and dysfunctions for each joint. There are also chapters on the spine and posture, as well as gait analysis. All chapters are referenced well and include helpful illustrations and tables.

*Practical Kinesiology for the Physical Therapist Assistant* will provide the PTA student with a sound understanding of kinesiology, and will be an excellent reference book for the practicing physical therapist assistant.

*Stephen P. Williams, PTA*



**Lillegard WA, Butcher JD, Rucker KS. *Handbook of Sports Medicine: A Symptom-Oriented Approach*, 2nd ed. Boston, Mass: Butterworth-Heinemann; 1999: 431 pp, illus.**

In the Foreword, Karl B. Fields, MD writes, "the editors and authors...should be congratulated on assembling practical, timely information on injury, illness, and supervision of sport into one valuable text." I agree with this statement with only one reservation. That is, I believe the strengths of the book are its medical information more so than with rehabilitation specifically. This is an excellent book for anyone who spends time with athletes on the field or acts as what the author calls a "frontline health care provider" and requires a reference for more than simply orthopedic injuries.

The text is divided into 3 parts: General Considerations, Injuries, and Medical Problems. Beginning part one is an extremely thorough and informative chapter on preparticipation exams for athletes. The benefits and shortcomings of such an exam are explained and there are many helpful figures and tables including examples of examination forms, and a table which briefly and clearly describes medical conditions and their effect on sports participation. Particularly impressive is the fact that this table was formulated to be understood by nonmedical as well as medical personnel. The section also contains chapters addressing the role of anti-inflammatory medications, modalities in rehabilitation, and mass-participation events. The chapter on therapeutic modalities is probably basic for most physical therapists, and the chapter is not meant to provide complete descriptions of the mechanisms for them; rather, to give the reader a summary and basic understanding. I particularly learned a great deal from the chapter dealing with mass-participation events, which I think is perfect for someone who is occasionally involved in helping to plan medical care for such an event, or volunteers at one as medical personnel.

The second section, entitled Injuries, is the longest of the book and covers injuries literally from head to toe by body region. Information pertaining to young athletes is also included, which is excellent as many of us may not be aware of specific injuries in orthopedic pediatrics. Chapters referring to ocular and maxillofacial injuries are not common place and were welcomed by the

reader. In general, the chapters discussing injuries are written from a medical viewpoint; there is more detail about the diagnosis than about rehabilitation. I consider that a strength of the book, however, because it is not necessary to find a text of interpreting radiographs when that information is integrated into each chapter. Practically, the chapters provide excellent data about return-to-play guidelines in easy to read tables as well as text. Controversies about return-to-play are discussed frankly. With only a few exceptions, the radiographs displayed in the book are clear and easy to understand because of the description under them and the way in which they are labeled. Another feature I liked was the algorithms. Algorithms for injuries are found in a number of chapters; they are easy to follow and may be helpful in narrowing down potential diagnoses. Again treatment and rehabilitation are included in the discussion, but the focus of the text is medical diagnosis.

The final part of the book discusses medical problems from bronchospasm to ear pain to sports oncology. I enjoyed this section the most as these topics are not typically found in the same book as orthopedic injuries. Amazingly, the text is not that large for all of the information it contains. Here again, algorithms are used very effectively. In some instances, it is clear that they are meant for physicians, but nonetheless, it is still quite interesting to read them. The chapters contained brief but sufficient review of anatomy and physiology, and as in the previous sections, clear, practical, and informative tables on assessment and return-to-play guidelines. In my opinion, this section is most beneficial to physical therapists or athletic trainers because it discusses subjects that may not have been touched on in school enough that the health care provider can participate in the athlete's care and perhaps better communicate with the physician through this information.

The text is very valuable from many points of view and to many health care professionals from family doctors who may not deal with sports medicine issues often. Some chapters even tell doctors when they should refer to a specialist, to physical therapists, and athletic trainers, but I think it is most valuable to providers who supervise athletes directly on the field and in practice. It's not as practical for physical therapists who work only in the clinic, but if you are looking for a doctor's

point of view of injuries, it is a good match.

*Allyson Baughman, MPT*



**Konin J. *Clinical Athletic Training*. Thorofare, NJ: SLACK Incorporated; 1997.**

The role of the ATC today has dramatically expanded. The author's intention in writing this book is to examine how the ATC fits into the present clinical setting. There are 20 chapters within this book and an excellent appendix. The chapters cover a wide range of specific areas related to ATC training, both past and more recent clinical opportunities.

The chapters are as follows: Chapter 1—Role of the Clinical Athletic Trainer; Chapter 2—Role of the Allied Health Care Providers; Chapter 3—Regulation of Athletic Training; Chapter 4—Health Care Delivery System; Chapter 5—Employment in Clinical Setting; Chapter 6—Planning a New Athletic Therapy Facility; Chapter 7—Administrative Policy and Procedure; Chapter 8—Physical Management; Chapter 9—Reimbursement for Health Care Services; Chapter 10—Clinical Marketing; Chapter 11—The Athletic Trainer as a Personnel Manager; Chapter 12—Communication Skills in Clinical Athletic Training; Chapter 13—Clinical Professionalism; Chapter 14—Medical History Taking; Chapter 15—Clinical Documentation; Chapter 16—Special Consideration for Industrial Athletic Training; Chapter 17—Special Consideration for the Non-traditional Athlete; Chapter 18—Recognition of Non-orthopedic Medical Pathology; Chapter 19—Pharmacology; and Chapter 20—Outcome Assessment in Athletic Training.

The editor has assembled many outstanding and experienced ATCs, PTs, and PTAs to contribute individual chapters in their area of expertise. Most of the chapters are quite short (10 to 15 pages). They emphasize the essentials related to the ATC profession. Despite multiple authors, the chapters are cohesive. Quite easily, the reader is able to pick individual chapters without reading the entire book.

The real strength of this book is that it is edited and written by an outstanding ATC/PT so there is experience and perspective provided. Some of the questions and "hot" issues include: the role of the ATC within the clinic, reimburse-

ments, industrial rehabilitation, documentation, and working with nontraditional patients. The editor has made it a point to examine many of the new challenges that the ATC faces in order to be a part of today's health care system.

Chapters 18 and 19 provide a succinct overview of some important elements that the trainer will be involved in. Chapter 18 is a recognition of non-orthopedic medical patients and Chapter 19 - Pharmacology. Both authors do a good job providing sufficient information needed by the ATC but avoiding going into too much depth.

Also the appendices from A to G give additional resources for the ATC to use as a guide. It contains ATC code of ethics, clinical industrial corporate athletic trainers committee position statement, blood borne pathogens, guidelines for athletic trainers, medical imaging and special diagnostic procedures documen-

tation, abbreviations, and a glossary of terms at the end.

My only suggestion would be to expand some of the more potentially problematic areas such as Chapter 4—Health Care Delivery System, Chapter 5—Employment in Clinical Setting, and Chapter 9—Reimbursement for Health Care System.

Overall, the book meets its objectives for the ATC. This book would also be very beneficial for PTs who are working with ATCs and for administrators in a hospital or clinic that employs ATCs. The book provides a thorough understanding of what an ATC does. Finally, I think any ATC would find this book very useful, using it for a reference guide and clinical tool.

*Dan Bankson, PT, MS, CSCS*



## Attention Writers & Speakers

The Orthopaedic Section invites you to get involved by presenting or writing for educational purposes. If you have expertise in an area and would like to be considered as a writer or speaker, please complete the form below and fax it to the Section office at 608-788-3965. You may e-mail your ideas to: [sklinski@centurytel.net](mailto:sklinski@centurytel.net). Please include the information listed below.



Name \_\_\_\_\_

Address \_\_\_\_\_

Office Phone \_\_\_\_\_

Home Phone \_\_\_\_\_

Fax Number \_\_\_\_\_

Email \_\_\_\_\_

I am interested in:

- \_\_\_\_\_ Educational Presentation
- \_\_\_\_\_ Home Study Course
- \_\_\_\_\_ Written Article for *OP*
- \_\_\_\_\_ Other (please specify)

Topics of interest or expertise \_\_\_\_\_

*Thank you!*

ORTHOPAEDIC SECTION, APTA, INC.  
**FALL BOARD OF DIRECTORS MEETING MINUTES**  
SEPTEMBER 25, 1999 • ALEXANDRIA, VA

The Fall Board of Directors Meeting was called to order at APTA Headquarters in Alexandria, VA at 8:30 am on Saturday, September 25, 1999 by President Bill Boissonnault.

**ROLL CALL:**

**Present:**

Bill Boissonnault, President  
Nancy White, Vice President  
Ann Grove, Treasurer  
Joe Farrell, Director  
Gary Smith, Director  
Joe Godges, Finance Member  
Paul Howard, Education Vice-Chair  
Susan Appling, *OP* Editor  
Phil McClure, Research Chair  
Steve McDavitt, Practice Co-Chair  
Helene Fearon, Practice Co-Chair  
Jean Bryan, OCS and Nominating Chair  
Terry Randall, Public Relations Chair  
Randy Roesch, APTA Liaison  
Terri DeFlorian, Executive Director  
LaVerne Gurske, Executive Secretary

**Absent:**

Lola Rosenbaum, Education Chair  
Mark Anderson, OHSIG President  
Wendy Lucas, Membership Co-Chair

**MEETING SUMMARY**

The agenda for the Fall Board of Directors Meeting on September 25, 1999 was approved as printed.

The minutes from the June 4, 1999 SME Board of Directors Meeting in Washington, D.C. were approved by the Board as printed.

**ACTION ITEMS**

**=MOTION 1=** Amend Motion 4 1999 CSM

"Approve an additional \$348 for advertising home study courses to PTA professional programs..." to "Approve an additional \$348 for advertising home study courses." **=PASSED=**

SS: The original motion was typed incorrectly.

**=MOTION 2=** Amend Motion 20 1999 SME

"In unusual circumstances we may allow a HSC author to exceed the \$250 expense allotment... a \$1000 maximum over expenditure as a one time annual budget item..." to "In unusual circumstances we may allow a HSC author to exceed the \$250 expense allotment... a \$1000 maximum over expenditure per course..." **=PASSED=**

SS: It is easier to budget by course than

by year because it is impossible to respond to authors' requests in the first course, not knowing how much money will be left by the end of the year

**=MOTION 3=** Approve the following nominations for APTA offices as submitted by the Nominating Committee:

Jan K Richardson, PT, PhD, OCS from North Carolina for President

Jayne L Snyder, PT MA from Nebraska for Vice President

Dennis Spillane, PT, MBA from California for Board of Directors

Babette S. Sanders from Illinois for Board of Directors

Roger Nelson from Pennsylvania for Board of Directors **=PASSED=**

**=MOTION 4=** Members have a choice of their dues being decreased from \$50 to \$40 and they can earmark where their \$10 goes. **=FAILED=**

**=AMENDED MOTION =** To keep the dues at \$50 a year and give them a choice of 4 items to choose where their money goes. **=FAILED=**

**=MOTION 5=** Offer the 2001 HSC on Current Concepts to Orthopaedic Section members for \$200 with an additional \$30 charge for those who want the CEUs. **=PASSED=**

**=MOTION 6=** Offer the 2001 HSC on Current Concepts to non-Orthopaedic Section members for \$400 with an additional \$30 charge for those who want the CEUs. **=PASSED=**

**=MOTION 7=** Offer the 2001 HSC on Current Concepts to PT schools for \$150. **=PASSED=**

**POLICIES**

**=POLICY 1=**

**DEADLINE**

**June 15**

**June 22**

**July 1**

**Weekend prior to Labor Day**

**September 6**

**Last weekend in September**

**November 1**

**=POLICY 2=** Terry Randall to approve any information before it is distributed to the MSN.

ADJOURNED 4:30 pm.

**=MOTION 8=** Publish McKenzie Study information in *OP*. Treat as a study group.

**=PASSED=**

**=MOTION 9=** *OP* Editor will be funded to attend Annual Conference and the Fall Meeting each year. **=PASSED=**

**=MOTION 10=** Take the balance in the Worker's Comp Focus Group fund (\$19,167.56) and reimburse the Orthopaedic Section and APTA for the amount they each contributed. **=PASSED=**

**=MOTION 11=** Pay \$2000 to the Colorado Chapter for lobbying expenses. **=PASSED=**

**=MOTION 12=** Move SIG business meetings to non-prime time hours during CSM, keep the Section business meeting on Saturday morning, and move the Board meeting to the Section suite. **=PASSED=**

**=MOTION 13=** The Orthopaedic Section market its HSCs and other educational offerings only to PTs and PT students except when courses are appropriate for PTAs and PTA students as indicated in the APTA policy on continuing education for PTAs and aids. **=PASSED=**

**=MOTION 14=** Offer a video tape with the Pediatrics HSC. **=FAILED=**

**=MOTION 15=** Have EMPI discontinue advertising our HSC series in their publications. **=PASSED=**

**=MOTION 16=** Approve the 2000 proposed budget. **=PASSED=**

**=MOTION 17=** The Gould Award be placed on hold and that the Awards Committee be charged to review this and all Section Awards and make a recommendation to the Board regarding this award at CSM 2000. **=PASSED=**

**ACTION**

SIGS develop their budget and forward to Section Board liaison for review.

Board liaison discusses budget with SIG Treasurer.

Board liaison forwards SIG budget to Section for inclusion into Finance Committee meeting notebooks.

Finance Committee reviews SIG budget at August meeting.

Finance Committee forwards recommended SIG budget to Section office for inclusion in Executive Committee Fall Meeting notebooks.

Executive Committee review and approve SIG budget at Fall Meeting.

Approved SIG budget sent to SIG treasurer.

# Section News

## Education Committee Report

The Combined Sections Meeting takes place in New Orleans from February 3-6, 2000. Our preconference program is cosponsored by the Foot and Ankle Special Interest Group (SIG) on February 1-2. As in previous years all Orthopaedic Section SIG and Roundtables (RT) are sponsoring educational programming during the conference. The SIG and RT business meetings are scheduled for the evening. New this year is the Patellofemoral Roundtable which is chaired by Christopher Powers, PhD, PT and will take place on Sunday, the final day of the conference. Our program has plenty of opportunities for learning for students, physical therapist assistants, and physical therapists. It is an excellent opportunity to attend a variety of educational and social programming and poster and platform presentations on current orthopaedic physical therapy research. Our Section Business Meeting will be Saturday morning and we will celebrate Mardi Gras style, 26 years of Section history that evening. We hope to see you there.

*Lola Rosenbaum, PT, MHS, OCS  
Education Committee Chair  
& Paul Howard, PT, PhD  
Education Committee Vice Chair*

## Orthopaedic Specialty Council Report

1. The Orthopedic Specialty Council and Specialization Academy of Content Experts (SACE) members write exam items. You do NOT have to be a certified specialist to serve as a SACE member. However, SACE members are expected to write 10 to 12 exam questions annually. SACE training is offered at CSM. If you would like to apply for this position, please contact Andrea Blake at the ABPTS (American Board of Physical Therapy Specialists) office.

2. ABPTS has changed the minimum practice hours to qualify to sit for the 2001 exam to 2,000 hours of direct patient care as defined by the *Guide to Physical Therapist Practice*. Although this is a radical change, the Orthopedic Specialty Council has been charged to **develop criteria** and decision rules to evaluate the effects of this change over the next 3 years. At that time the requirements will be adjusted based on

criteria such as performance on the exam and number of years of practice. These changes and the rationale will be addressed at the forum for Orthopaedic Certification/Recertification at CSM.

3. In 2000 the Council will be starting a revalidation of the Orthopaedic DACP (Description of Advanced Clinical Practice), which is the blue print for the specialty exam. At this time the Council feels that the current DACP is meeting our needs but needs updating/revising and needs to be in Guide language. We will be randomly sampling current specialists and soliciting input from nonspecialists for the survey. The survey will address issues of both importance and frequency in advanced clinical orthopedic practice. We plan to offer the survey either in hard copy, mailed format, or in electronic email format. There will be a link to the survey from the Orthopaedic Section homepage. We feel this will be both a service to the survey respondents as well as a potential huge cost savings. If you would like to volunteer to help with the development, pilot testing, or actual survey, please call Jean Bryan at 210-601-6132. Please watch for the link from the Orthopaedic Section web page to the survey in September 2000.

4. The Orthopaedic Section remains dedicated to the specialization process. The Orthopaedic Specialization is currently the largest specialty with over 1200 members.

5. Requests for information may be directed to the section or to Jean M Bryan at 210-601-6132.

*Jean M. Bryan, MPT, PhD, OCS  
Orthopaedic Specialty Council Chair*

## Practice Committee Report

As a report method a time line is used here to present the Practice Committee activities following CSM 1999 to the present. The Practice Committee was intimately involved with APTA and AAOMPT as well as many Section members in many areas of practice. The biggest practice issue (even more than direct access) that was *membership driven* were requests for assistance defending attempts from legislation to restrict the practice of manipulation by physical therapists. The Practice Committee provided the membership with

the following strategies, actions, and assistance.

1. Assisted in the 1999 Update and promotion of Manipulation Action Packet from APTA Government Affairs

2. At CSM 1999: Orthopaedic Section Practice Committee assisted by AAOMPT Practice Affairs Committee completed the Compendium on Manual and Manipulative Therapy in Physical Therapy.

3. At CSM 1999: Completion of Practice Network (members of Orthopaedic Section and AAOMPT) for national communication on issues relevant to PT practice in Orthopaedics and Manual Therapy

4. At CSM 1999: Discussion, coordination and agreement on definition of manipulation/mobilization between the Orthopaedic Section, APTA Dept. of Practice, and AAOMPT. (Fearon/Guccione/McDavitt) AAOMPT definition from AAOMPT DACP accepted and adapted into revised *Guide to Physical Therapist Practice*. Consistency now exists in AAOMPT DACP, "The Guide" and CPT Coding.

**Manipulation / Mobilization:** "the skilled passive movement to a joint and or the related soft tissues at varying speeds and amplitudes including a small amplitude, high velocity therapeutic movement."

5. As of June 1999: 18 states and 22 pieces of legislation were directed at controlling and restricting PTs from manipulation spearheaded by Chiropractors. The attempt at restriction on manipulation was the biggest legislative issue facing PTs in 1999. APTA, the Orthopaedic Section, and AAOMPT were directly involved in all cases providing materials, guidance, and mentoring to defeat nearly all such restrictive legislative efforts. Some remain ongoing as of the date of this report. At the Manipulation Forum at APTA Annual Conference it was agreed that we needed to consolidate resources and develop a proactive future strategy in handling such restrictive legislation as opposed to the reactive strategies of the past.

6. August 1999: AAOMPT Practice Affairs, the Orthopaedic Section and APTA Government Affairs developed and distributed a component manipulation survey to gain an appreciation of the national scope of the issues related to the legislative restriction on PTs practicing

manipulation. APTA analyzed the survey results and issues presented were categorized as legislative, regulatory, practice, and education. (From APTA Govt. Affairs and Take Action Packet.)

**Legislative:** 18 states introduced legislation to restrict manipulation

- 1 passed as of August 16, 1999 (*Tennessee*)
- 3 State practice act prohibits (AR, WA, WV) (*JM interpretation*)
- 2 require physician referral to do (ME, NC)
- 3 prohibit chiropractic manipulation or manipulative technique.

**Regulatory:** No state boards have made an option of manipulation in state practice acts.

State Attorney General Opinions

Against: CA: can not manipulate hard tissue, ie, bone

KS: AG ruled that chiropractic manual manipulation is the domain of DC, not MD, etc, therefore MD can not direct PT to do chiropractic manual manipulation.

**Practice:** Manipulation clearly defined in the *Guide to Physical Therapist Practice*.

**Education:** Normative Model outlines the educational and clinical foundations and coursework on manipulation.

7. September 1999: Results from the questionnaire were presented to a panel hosted by APTA and the Orthopaedic Section at APTA. Jerry Connolly and Steve McDavitt facilitated representative experts from AAOMPT, the Orthopaedic Section, APTA, state PT legislation, and institutional and continuing education academia in a manual therapy and manipulation strategic planning meeting. We felt as a group that chapters have done well thus far to protect, preserve, and advance PT practice. We also recognized however that restriction attempts on PT practice especially in the skill of manipulation would continue indefinitely. Therefore the group formulated and formalized short- and long-term goals directed at dealing with proactive strategies in the categories of legislative, regulatory, practice and education.

8. October 7, 1999: Manual therapy and manipulation strategic plan action items to be distributed to the panel and then distributed to appropriate committees, sections, chapters, and individuals with time lines for 1999 year end, CSM 2000, and APTA Annual Conference 2000.

More information will be forth coming as developments from the September manual and manipulation therapy

strategic planning session are disseminated in the next few weeks. Strategies and recommendations will be reported, proposed, and delegated where necessary over the next few months leading to CSM 2000.

Since we are a member-driven committee, please continue to keep us informed of your practice needs.

*Stephen Mc Davitt, PT, MS*  
*Helene Fearon, PT*  
*Practice Committee Co-Chairs*

### **Public Relations**

The exhibit booth will be used at the American College of Nurse Practitioners symposium in Nashville on Oct 7-9. I expect this to be a very good opportunity to make contact with professionals that have the capability to make a positive impact on their patients by referring them to a physical therapist.

On Oct 22 - 23rd the booth will be displayed at the Student Conclave. This is an exciting meeting for PT and PTA students who are generally eager to find out more information about the benefits of joining the Orthopaedic Section. This meeting is crucial for maintaining our student membership.

Work has begun to develop the Public Relations section of our web site at [www.orthopt.org](http://www.orthopt.org). Other organizations' sites are being reviewed to obtain ideas for possible formats and material. If you have any ideas or suggestions, please contact the Section office.

Rick Watson, the Media Spokesperson Network (MSN) director, has developed a great method for delivering a press release to the media. A press release was posted on our web page [www.orthopt.org](http://www.orthopt.org) and then the MSN members were alerted to spread the word through their media contacts. The press release on the web page included a PR kit which makes it attractive for newspapers to download and use the pictures and graphics with their stories. Thanks Rick for your many hours and technical expertise.

I know there are a lot of physical therapists doing PR activities that go unrecognized. If you been successful in getting exposure in the media for our profession, please let us know.

*Terry Randall, PT, ATC*  
*Chair, Public Relations*

### **Nominating Committee Report**

1. The Nominations Committee represents the following slate of candidates

for the upcoming Orthopaedic Section elections:

Board of Directors: Joe Farrell  
Nominating Committee: Bill O'Grady  
Spencer Blackie

2. The committee established procedures for handling requests for recommendation for nomination for national office. Both section members and nonsection members may request recommendations. Individuals will be recommended for nomination based on review of the CV for evidence of previous experience qualifying that person for the position. For example, to recommend someone for nomination as Treasurer, the individual should have experience as a component Treasurer or Finance Committee Member. Recommendations will be approved by the BOD and the forms will be completed by the Chair of the Nominating Committee, representing the Orthopaedic Section.

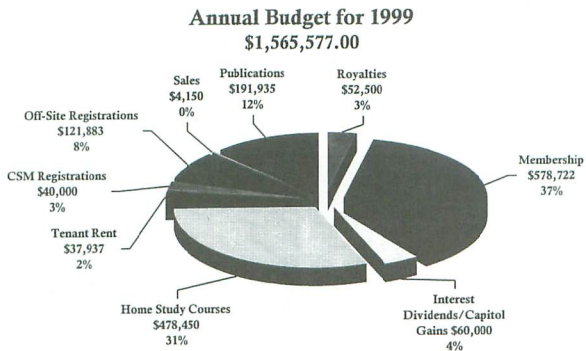
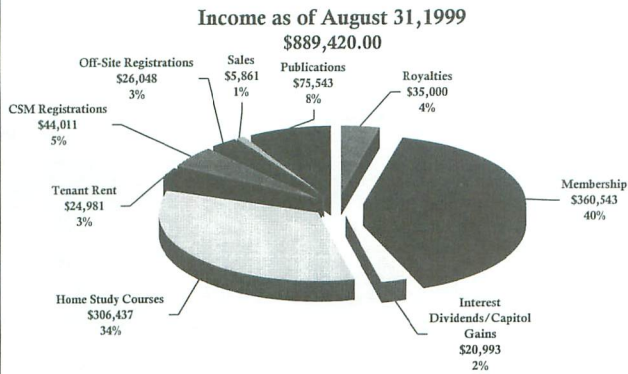
3. The committee continues to welcome self-nominations and recommendations for nominations (for both Section and national office) from you—the membership. Calls for nominations are published regularly in OP.

4. Please exercise your option as a Section member and VOTE in the current election. Ballots must be received by 31 Dec. Election results will be announced at the Orthopaedic Section Business Meeting at CSM.

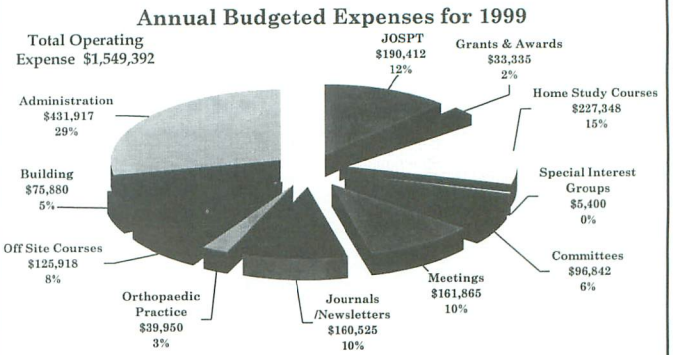
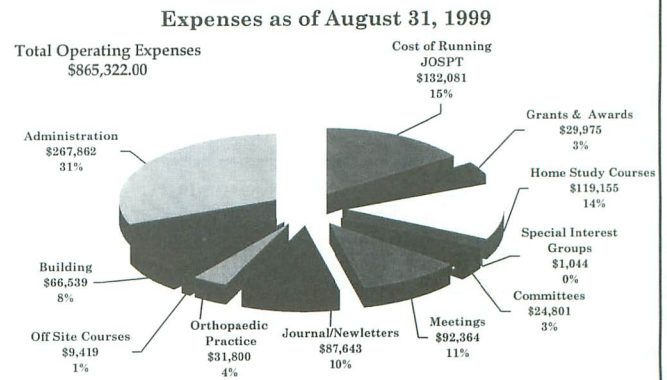
*Jean M. Bryan, MPT, PhD, OCS*  
*Chair, Nominating Committee*

### **Finance Committee Report** (See graphs on following page)

## ORTHOPAEDIC SECTION, APTA, INC. BUDGETED TO ACTUAL INCOME - 1999



## ORTHOPAEDIC SECTION, APTA, INC. BUDGETED TO ACTUAL EXPENSES - 1999



### AAOMPT 2000 — FIRST CALL FOR ABSTRACTS

The 6th Annual Conference of the American Academy of Orthopaedic Manual Physical Therapists will be held in the fall of 2000. It promises to be an exciting event, which will include the Distinguished Researcher and Clinician Dr. Gordon Waddell author of *The Back Pain Revolution*. Interested individuals are invited to submit abstracts for presentation in slide or poster format. The AAOMPT research committee chairman must receive the abstract and 2 photocopies, by June 1, 2000. Abstracts received after this date will be returned. You will be notified of the acceptance/rejection of your abstracts in July of 2000. If you have any questions call the research committee chairman at (210) 221-8410 or -6167 or email at: Timothy.Flynn@cen.amedd.army.mil

**CONTENT.** The Academy is soliciting all avenues of research inquiry from case-report and case-series up to clinical trials. The Academy is particularly interested in evaluating efficacy of intervention strategies using randomized-controlled clinical trials. The abstract should include 1) Purpose; 2) Subjects; 3) Method; 4) Analyses; 5) Results; 6) Conclusions; 7) Clinical Relevance.

**PUBLICATION.** The accepted abstracts will be published in *The Journal of Manual & Manipulative Therapy*, which has readership in over 40 countries.

**Submission Format.** The format for the submitted abstracts is as follows:

The abstract should fit on one page with a one inch margin all round. The text should be typed as one continuous paragraph. Type the title of the research in ALL CAPS at the top of the page followed by the authors' names. Immediately following the names, type the institution, city, and state where the research was done. Please include a current email address where you can be contacted. Also include a computer diskette with the abstract in MS Word format.

**Presentation.** The presentation of the accepted research will be in either a slide or poster session. The slide session will be limited to 15 minutes followed by a 5-minute discussion, this session will be primarily for research reports and randomized clinical trials. The poster session will include a viewing and question answer period and will be primarily for case report/series.

**Abstract Award.** The author of the abstract deemed of the highest quality of those submitted will be awarded the Annual AAOMPT Excellence in Research Award. This award will consist of an award certificate and reimbursement of the conference registration fee.

**Shipping.** To prevent damage, insert cardboard backing in the envelope with the abstract, diskette, and copies. Mail to the AAOMPT research committee chairman at:

LTC Timothy W. Flynn, PT, PhD, OCS, FAAOMPT  
U.S. Army-Baylor Graduate Program in Physical Therapy  
ATTN: MCCS-HMT (AAOMPT Research)  
3151 Scott Road, Room 1303  
Fort Sam Houston, TX 78234-6138

To receive notice that your abstract was received by AAOMPT, please enclose a self-addressed and stamped postcard with the abstract or preferably an email address where you can be reached. Your abstract will be assigned a number and you will be notified electronically or via the postcard.

**Foot & Ankle Special Interest Group,  
Orthopaedic Section, APTA, Inc.**

proudly presents:

**“Research Retreat 2000”  
“Static and Dynamic Classification of the Foot”**

May 19 - 20, 2000

(location to be determined)

**OBJECTIVES:**

The purpose of this retreat is to provide a forum for discussion on research topics related to the foot and ankle with the goal of providing direction for future research. This first research retreat will focus on static and dynamic classification of the foot with the following objectives:

- Based upon osteological studies of the foot, discuss the functional and clinical significance of anatomical variations in the subtalar joint
- Discuss previous and current research efforts to develop a static classification or alignment scheme (including foot shape, soft tissue characteristics, etc.) to predict dynamic foot movement
- Discuss previous and current research efforts to dynamically classify the foot using parameters such as motion magnitude, timing, etc.
- Discuss research focused on the relationships between static and dynamic function of the foot.

**FORMAT:**

The format will incorporate one hour podium presentations by the primary speakers with small group discussions to follow. A limited number of participants will be given the opportunity to present related research in 10 - 15 minute podium presentations. Abstracts of all research will be required and will be distributed to all retreat participants in the form of a meeting proceedings.

**CALL FOR ABSTRACTS (DUE JANUARY 15, 2000):**

*If you choose to submit an abstract:* a one page abstract including the title, authors and affiliations centered at the top, followed by the following sections: Introduction, Methods, Results, Discussion, and Conclusions may be submitted. Headings should be on a separate line, in bold and capital letters. A minimum font size of 10 and margins of 1 inch are required. Abstracts will be reviewed for their relevance and scientific merit and authors will receive a response by February 15, 2000. Abstracts may be sent to:

Irene McClay, PhD, PT, FASIG Research Committee Chair  
305 McKinly Lab, University of Delaware  
Newark, DE 19716  
302-831-4263 \* 302-831-4234 (FAX)

**FACULTY:**

Jan Bruckner, PhD, PT  
Mark Cornwall, PhD, PT  
Howard Hillstrom, PhD  
Irene McClay, PhD, PT  
Tom McPoil, PhD, PT, ATC

**SCHEDULE:**

Friday, May 19:  
1:00 PM - 7:00 PM  
Saturday, May 20:  
8:30 AM - 5:00 PM

**TUITION: \$150.00**

*For more information and to register, please contact:*

Tara Fredrickson  
c/o Orthopaedic Section, APTA, Inc.  
2920 East Ave. South, Suite 200  
La Crosse, WI 54601  
800/444-3982 \* tfred@centuryinter.net



# ORTHOPAEDIC SECTION CSM PROGRAMMING

February 1-6, 2000 • New Orleans, Louisiana

## Tuesday & Wednesday February 1-2, 2000

### 8:00am-5:00pm

#### Pre-Instructional Course

Foot and Ankle Dysfunction: Evaluation and Management of Diabetic, Arthritic, and Orthopaedic Disorders

Gary Hunt, PT, MS, OCS  
Joe Shrader, PT, CPed  
Tom McPoil, PT, PhD, ATC  
Michael Mueller, PT, PhD  
Susan Appling, PT, MS, OCS  
Jim Birke, PT, PhD

## THURSDAY February 3, 2000

### 12:30pm-2:30pm

#### Creative Teaching Strategies for Enhancing Clinical Learning: Maximizing Limited Time

Moderator: Lola Rosenbaum, PT, MHS, OCS  
Speaker: Jody Gandy, PT, PhD

### 12:00pm-4:30pm

Research Platforms Session A  
Research Platforms Session B

### 1:30pm-4:30pm

#### Management of Multiple Trauma Clients in Developing Countries

Moderator: Kim Dunleavy, PT, MS, MOMT, OCS  
Speakers: Kim Dunleavy, PT, MS, MOMT, OCS  
Richard Fisher, MD  
Elizabeth Kay, PT, PhD

### 2:00pm-3:30pm

#### Orthopaedic Certified Specialist (OCS) Exam and Description of Advanced Clinical Practice (DACP) – What's the Deal?

Speakers: Richard Ritter, PT, MA  
Joe Godges, MPT, OCS

### 2:30pm-4:30pm

#### Manuscript Reviewer Workshop

Speakers: Richard DiFabio, PT, PhD, Editor-in-Chief  
JOSPT Editorial Board

### 3:30pm-4:30pm

#### ABPTS OCS Update

Speakers: Jean Bryan, PT, PhD, OCS  
Michael Cibulka, PT, OCS  
Robert Johnson, PT, MS, OCS

### 4:30pm-6:30 pm

Unopposed Exhibit Hall

### 6:30pm-7:30pm

Meet the JOSPT Editor and Editorial Board:  
Question and Answer Forum

## FRIDAY February 4, 2000

### 7:00am-8:00am

Public Relations: "The link between your clinic and the public"

### 7:00am-10:30am

JOSPT Editorial Board Meeting

### 8:00am-10:30am & 3:30pm-8:30pm

Orthopaedic Board of Directors Meeting

### 8:00am-10:00am

Research Platforms Session A  
Research Platforms Session B

### 9:00am-10:30am

#### Improving the Quality of Care for Patients with Hip Fractures

Moderator: Douglas White, PT, OCS  
Speakers: Rose-Marie Cervone, BSN, MPA, RN  
Douglas White, PT, OCS

### 10:30am-12:30 pm

Unopposed Exhibit Hall

### 12:30pm-2:30pm

JOSPT Board of Directors Meeting

### 12:30pm-4:30pm

Occupational Health SIG Programming  
Moderator: Ray Vigil, PT, OCS

### 12:30pm-2:30pm

Cultural Aspects of Treating Injured Workers"  
Speakers: D. Tein Do, PT  
Ray Vigil, PT, OCS

### 2:30pm-4:30pm

Worker's Compensation - What Happens After Therapy!

Speaker: Kathryn Mueller, MD, MPH, FACEP, FACOEM

### 12:30pm-3:30pm

#### Pain Management SIG Programming

Moderator: Joe Kleinkort PT, MA, PhD  
Nutrition, Exercise, and Movement in the Patient Living with Chronic Pain  
Speaker: Mary Lou Galantino, PT, MS, PhD

### 12:30pm-4:30pm

#### Foot and Ankle SIG Programming

Moderator: Mark Cornwall, PT, PhD, CPed

### 12:30pm-1:30pm

Case Study: Plantar Fasciitis  
Speaker: Susan Appling, PT, MS, OCS

### 1:30pm-2:30pm

Case Study: Rheumatoid Arthritic Patients  
Speaker: Joe Shrader, PT, CPed

### 2:30pm-4:30pm

Footwear & Foot Orthoses: Conservative Management of Foot & Ankle Disorders  
Moderator: Jim Birke, PT, PhD  
Speakers: Michael Mueller, PT, PhD  
Susan Appling, PT, MS, OCS  
Thomas McPoil, PT, PhD, ATC  
Joe Shrader, PT, CPed

### 5:00pm-6:00pm

Animal Physical Therapist SIG Business Meeting  
Foot and Ankle SIG Business Meeting  
Manual Therapy Roundtable Business Meeting  
Pain Management SIG Business Meeting  
PTA Roundtable Business Meeting

### 5:00pm-6:30pm

Occupational Health SIG Business Meeting

### 6:30pm-7:30pm

Performing Arts SIG Business Meeting

### 7:00pm-8:30pm

JOSPT and Sports/Ortho SIGs and Roundtable Chairs Meeting

### 7:30pm-8:30pm

Proposed Peer Review/Legal Practice SIG Informational Meeting

## SATURDAY February 5, 2000

### 7:00am-8:30am

Book Reviewer Workshop  
Speakers: Sandra Cassidy, PT, PhD  
Richard DiFabio, PT, PhD  
JOSPT Editorial Board Members

### 8:30am-10:30am

Section Business Meeting

### 10:30am-12:30 pm

Unopposed Exhibit Hall

### 12:30pm-2:30pm

#### Application of the *Guide to Physical Therapist Practice: Classroom to Clinic*

Moderator: Lisa Giallonardo, PT, MS, OCS  
Speakers: Lisa Giallonardo, PT, MS, OCS  
Catherine Patla, DPT, MMSc, OCS  
Sandy Davis, PT, ACCE  
Rhonda R. Meyer, PT

### 12:30pm-3:30pm

#### Manual Therapy Roundtable Programming

Moderator: Patty Zorn, PT, M.app.Sci, FAAOMPT  
Patellofemoral Dysfunction: Scientific Findings, Examinations and Diagnostic Techniques, and Advanced Treatment Methods  
Speaker: Kate Grace, PT, OPA-C

### 12:30pm-3:30pm

PTA Roundtable Programming  
Moderator: Gary Shankman, OPA-C, PTA, ATC

### 12:30pm-1:30pm

Concepts of Muscle Training  
Speaker: Mark Albert, PT, Med, ATC, SCS

### 1:30pm-2:30pm

Essentials of Spine Stabilization  
Speaker: Dave Giardina, PTA, ATC, LAT

### 2:30pm-3:30pm

Articular Cartilage Injury and Repair  
Speaker: Stan Dysart, MD

### 12:30pm-4:30pm

Performing Arts SIG Programming  
Moderator: Nicholas Quarrier, PT, MHS, OCS

### 12:30pm-1:30pm

Adolescent Idiopathic Scoliosis: An Overview  
Speakers: Christine Ploski, PT, MS, PCS  
Michalina Cassella, PT

### 1:30pm-2:00pm

Breathing Techniques to Enhance Performance Quality  
Speaker: Lynn Medoff, MA, MPT

### 2:00pm-2:30pm

Working with the Performing Artists from the Perspective of a Feldenkrais Practitioner  
Speakers: Margaret J. Pittenger, MSPT  
Susan Robinson, DPT

### 2:30pm-3:00pm

Athletic Taping for the Performing Artist  
Speakers: Nicholas Quarrier, PT, MHS, OCS

### 3:00pm-4:30pm

Dialog in Performing Arts Research  
Panelists:

Nancy Byl, PT, PhD, MPH, BS  
Phyllis Brown, PT, PhD  
Linda Van Dillen, PT, PhD  
Katherine Roach, PT, PhD

### 12:30pm-4:30pm

#### Animal Physical Therapist SIG Programming

Moderator: Cheryl Riegger Krugh, PT, ScD

### 12:30pm-2:00pm

Evaluation and Treatment of the Inflammatory Process in Animals  
Speaker: Lyn Paul Taylor, RPT

### 2:00pm-3:30pm

Integrating Physical Therapy in Animal Health  
Speaker: Gail Wetzler, PT, CVMI, MLI, ESMT

### 3:30pm-4:30pm

Animal Physical Therapist Forum  
Speaker: Lin McGonagle, MSPT

### 1:00pm-3:00pm

Research Platforms Session A  
Research Platforms Session B

### 3:00pm-3:30pm

Rose Excellence in Research Platform presentation

### 6:30pm-7:30pm

Orthopaedic Section Awards Ceremony

### 7:30pm-10:30pm

Black Tie and Roses Reception

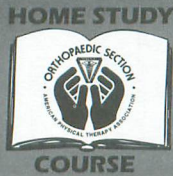
## SUNDAY February 6, 2000

### 8:00am-12:00pm

Occupational Health SIG BOD Meeting

### 8:30am-11:30am

Patellofemoral Roundtable Programming  
Moderator: Christopher Powers, PT, PhD  
The Influence of Hip and Foot Mechanism on Patellofemoral Joint Dysfunction  
Speakers: Steve Reischl, DPT, OCS  
Michael Gross, PT, PhD  
Irene McClay, PT, PhD  
Ron Hruska, PT, MPA



# ORTHOPAEDIC INTERVENTIONS FOR PEDIATRIC PATIENTS



Orthopaedic Section Home Study Course 10.2

**Register now!**  
**First monograph available in April, 2000**

**EDITORIAL STAFF:**  
Carolyn Wadsworth, MS, PT, CHT, OCS, Editor  
Karla Laubenthal, MS, PT, PCS, Subject Matter Editor

## COURSE DESCRIPTION

This course is appropriate for both novice and experienced physical therapists who treat pediatric patients occasionally or exclusively. It offers a comprehensive discussion of musculoskeletal development, common pediatric orthopedic disorders (including a monograph on scoliosis) and the lifespan issues of persons with cerebral palsy and spina bifida. Contemporary and comprehensive musculoskeletal assessment, therapeutic intervention, lower extremity bracing and splinting, interdisciplinary and family-centered practice, and orthopedic surgical management of the pediatric patient are skillfully presented by experts in the field, and illustrated through case study presentations. Do not miss the chance to enhance your understanding of these pediatric orthopedic topics.

## CONTINUING EDUCATION CREDIT

30 contact hours. Completion of the six-monograph series and satisfactory performance on the final exam will give the registrant 30 contact hours of continuing education. Only the registrant named will obtain the CEUs. No exceptions will be made.

## TOPICS AND AUTHORS

- 10.2.1 **Lower-Extremity Musculoskeletal Development**  
Beverly Cusick, PT, MS
- 10.2.2 **Spina Bifida: Lifespan Management**  
Richard Adams, MD
- 10.2.3 **Lower Leg Orthoses and Casts**  
Jenni Dabelstein, BPhy, GrDipHSc
- 10.2.4 **Cerebral Palsy: Lifespan Management**  
Dolores Bertoti, PT, MS, PCS
- 10.2.5 **Pediatric Musculoskeletal Disorders**  
Judy Leach, PT
- 10.2.6 **Scoliosis and Spinal Disorders**  
David H. Godfried, MD

**AN INDEPENDENT STUDY COURSE DESIGNED FOR INDIVIDUAL CONTINUING EDUCATION**

## 10.2 Home Study Course Registration Form

Name \_\_\_\_\_ Credentials \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Daytime Telephone No. (\_\_\_\_\_) \_\_\_\_\_ APTA# \_\_\_\_\_

For clarity, enclose business card.

### Please check:

- \$150 Orthopaedic Section Member
  - \$225 APTA Member
  - \$300 Non-APTA Member
- (Wisconsin Residents add appropriate Sales Tax)

\*If notification of cancellation is received in writing prior to the course, the registration fee will be refunded, less a 20% administrative fee. Absolutely no refunds will be given after the start of the course. Special discounted rates are available for institutions with multiple registrants. Call the Section office for complete details.

**I wish to join the Orthopaedic Section and take advantage of the member rate.** (Note: must already be a member of APTA.)

- I wish to become a PTA Member (\$30)
- I wish to become a PT Member (\$50)

**Please make check payable to: Orthopaedic Section, APTA**

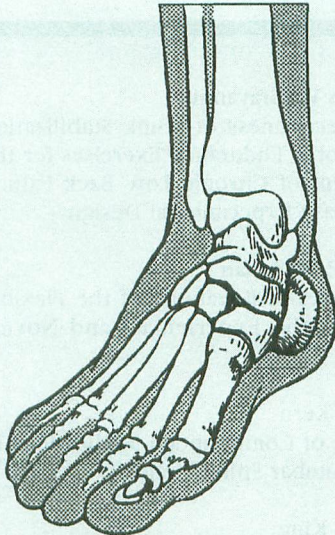
**Fax registration & VISA or MasterCard number to: 608-788-3965**

VISA  MasterCard Exp. Date \_\_\_\_\_

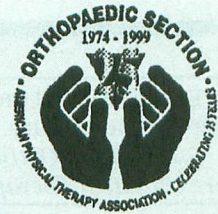


Signature \_\_\_\_\_

Mail check and registration to: Orthopaedic Section, APTA, 2920 East Avenue South, Suite 200, La Crosse, WI 54601  
Questions call 1-800-444-3982 ext 213 or e-mail us at kpohja@centurytel.net



The Orthopaedic Section, APTA, Inc.  
and the  
Foot & Ankle SIG, Orthopaedic Section  
proudly present:



**“FOOT & ANKLE DYSFUNCTION:  
Evaluation and Management of Diabetic,  
Arthritic, and Orthopaedic Disorders”**

February 1 & 2, 2000  
2000 Combined Sections Meeting \* Preconference Course  
New Orleans, LA

**COURSE OUTLINE:**

**Tuesday, February 1, 2000**

- 8:00 - 8:15 AM: Introduction
- 8:15 - 9:15 AM: Functional Anatomy of the Foot and Ankle
- 9:15 - 9:30 AM: BREAK
- 9:30 - 10:45 AM: Neurological Factors Affecting Foot and Ankle Function
- 10:45 - 12:00 PM: The Tissue Stress Model: A Basis for the Physical Examination of the Foot and Ankle
- 12:00 - 1:00 PM: LUNCH
- 1:00 - 2:00 PM: Pathomechanics Affecting the Diabetic Neuropathic Foot
- 2:00 - 2:15 PM: BREAK
- 2:15 - 3:15 PM: Evaluation of the Diabetic Foot
- 3:15 - 4:15 PM: Management Considerations for the Diabetic Foot
- 4:15 - 5:30 PM: Case Study - Neuropathic Diabetic Patient

**Wednesday, February 2, 2000**

- 8:00 - 9:00 AM: Factors Contributing to Orthopaedic & Sports Foot and Ankle Problems
- 9:00 - 9:15 AM: BREAK
- 9:15 - 10:15 AM: Evaluation of Orthopaedic & Sports Related Foot and Ankle Problems
- 10:15 - 11:15 AM: Management of Common Orthopaedic & Sports Related Injuries Affecting the Foot and Ankle
- 11:15 - 12:30 PM: Foot Orthoses: Design and Effectiveness
- 12:30 - 1:30 PM: LUNCH
- 1:30 - 2:30 PM: Pathomechanics Affecting the Rheumatoid Foot
- 2:30 - 3:15 PM: Evaluation of the Rheumatoid Foot
- 3:15 - 3:30 PM: BREAK
- 3:30 - 5:00 PM: Management Considerations for the Rheumatoid Foot
- 5:00 - 5:15 PM: Course Summary & Evaluations

**SPEAKERS:**

Susan Appling, MS, PT, OCS  
Joe Shrader, PT, CPed

Michael Mueller, PhD, PT  
Jim Birke, PhD, PT

Gary Hunt, MS, PT, OCS  
Tom McPoil, PhD, PT, ATC

**TUITION:**

	Early Bird (prior to 12/10/99)	Advanced (prior to 1/07/99)	On-Site
Orthopaedic Section PT Members:	\$200.00	\$250.00	\$275.00
Orthopaedic Section PTA Members:	\$175.00	\$225.00	\$250.00
APTA PT Members:	\$255.00	\$305.00	\$330.00
APTA PTA Members:	\$215.00	\$265.00	\$290.00
Non-APTA Members:	\$275.00	\$325.00	\$350.00
Orthopaedic Section Student Members:	\$ 75.00	\$125.00	\$150.00
Student Non-Members:	\$ 90.00	\$140.00	\$165.00

**How to Register:** Contact APTA's Service Center at 800/999-2782 x 3395 for details on registering.  
**Questions about the course?** Contact Tara Fredrickson at the Orthopaedic Section office: 800/444-3982.



# 2000 Poster and Platform Presentations

NOTE: You will find the complete abstracts in the January 2000 issue of the *Journal of Orthopaedic and Sports Physical Therapy*.

## POSTER PRESENTATIONS

Kathleen M. Alexander  
The Effects of Balance Training on Pain, Function and Static and Dynamic Standing Balance in Subjects with Chronic Unilateral Low Back Pain: Preliminary Data

Kathleen M. Alexander  
Static and Dynamic Standing Balance of Subjects with and without Chronic Unilateral Low Back Pain: Preliminary Data

Barbara C. Belyea  
Functional Changes Resulting from Hyaluronic Acid Injections in Osteoarthritic Knees

Lois E. Breden  
The Effects of Static Magnets on Pain Perception due to Exercise Induced Delayed Onset Muscle Soreness (DOMS)

Ronald F. Bybee  
Frequency and Duration of Lumbar Flexion Using the PAS-1000

Dennis L. Cade  
The Effects of Backpack Load Carrying on Dynamic Balance as Measured by Limits of Stability

Chris Garcia  
Effect of Taping and Bracing on Static and Dynamic Balance of the Sprained Ankle

Patrick J. Carley  
The Effect of Hand Dominance on Standing Balance Variables with Respect to Three Different Ground Reactive Force Interfaces

Gary S. Chleboun  
Architecture of Selected Muscles of the Human Shoulder

Rebecca A. Cox  
Comparison of Forefoot Varus Measurements Obtained From Non-Weightbearing Orthotic Casting

Ben Darter  
Relationship Between Clinical Measurements and Motion of the First Metatarsophalangeal Joint During Functional Activities

Scott MB Delcomyn  
The Relationship Between Posterior Reach and its Component Movements at the Shoulder Joint During Active Range of Motion

Kelly Detering  
Effects of Acetic Acid Iontophoresis on Heel Spur Reabsorption

Karin J. Edwards  
Metabolic Responses of Subjects Walking with Hiking Poles

Ginger S. Everhart  
Physical Therapy Clinical Residency Programs: Graduates' Perceptions of Impact and Future Role

Randy Fleming  
The Effects of Repetitive Stretching on Elastic Exercise Band Resistance

Janet K. Freburger  
Acute Care of Patients Following Total Hip Arthroplasty: The Relationship Between the Utilization of Physical Therapy Services and Outcomes of Care

Robert J. Friberg  
Symptom Distribution for Upper Limb Tension Tests 1, 2a, 2b, 3

Susan C. Guynes  
The Reliability of Inclinometer Measurements of Forefoot Position

Craig R. Hanson  
Standardization and Comparison of True Blue™ and Thera-Band® Resistance Bands

Mary K. Hastings  
Measurement of Tissue Stiffness Using a Portable Indentor

Nicole L. Holder  
Cause, Prevalence, and Response to Occupational Musculoskeletal Injuries Reported by Physical Therapists and Physical Therapist Assistants

Elizabeth R. Ikeda  
The Effect of Static Magnetic Shoe Insoles on Isometric Grip Strength: A Double Blind Study

Sarah I. Johnson  
Effects of Stretching and Pelvic Inclination on Quadriceps Flexibility

Nicholas V. Karayannis  
The Effectiveness of Trunk Stabilization and Aerobic Endurance Exercises for the Treatment of Chronic Low Back Pain: A Single-Case Experimental Design

Wendy B. Katzman  
Differences in Reliability of the Flexible Ruler for the Experienced and Novice Tester

Carolyn Kern  
The Use of Compounded Medications in Acute Lumbar Spine Strain

Lorna A. King  
A Prospective Randomized Trial of Two Exercise Programs for Older Patients with Chronic Low Back Pain and Spondylosis

Chad M. Leslie  
Influence of Short Hamstring Muscles on Weight of the Leg Measurements and Subsequent Quadriceps and Hamstring Isokinetic Torques at Slow and Fast Speeds

David L. Levison  
The Development of an Outcomes Tool for an Outpatient Physical Therapy Clinic

Gaetano Lombardo  
A Comparison of a Trunk Muscle Strength Ratio to a Graded Lumbar Stability Protocol

Mary Beth Loyd  
Patello-Femoral Pain Syndrome as an Indicator of Hypopituitarism in a Primary Care Physical Therapy Patient: A Case Study

Rich D. Maas  
Proximal Tibio-Fibular Instability with Resultant Common Peroneal Irritation Manifesting Itself as Chronic Ankle Pain: A Case Report

Susan D. MacDonald  
The Management of a Geriatric Patient with Forefoot Pain Using Soft Foot Orthoses

Brian A. Maldonado  
Quality of Life Outcomes and Physical Therapy Treatment in Patients with Osteoarthritis

Katrina S. Maluf  
Classification and Use of a Functional Approach in the Treatment of a Patient with Chronic Low Back Pain: Case Study

Katrina S. Maluf  
Validity of Measurements Obtained from an Electronic Monitoring System in Diabetic Footwear

Gary E. Mattingly  
A Mathematical Model for Clinically Measuring Protraction and Retraction of the Sternoclavicular Joint

Marykate McDonnell  
Use of a Specific, Active Exercise Program in the Treatment of a Patient with Chronic Headaches Associated with Neck Pain: A Case Report

Sue L. McPherson  
Utilizing Verbal Reports to Assess Changes in Individuals' Cognition While Learning a Functional Task

Susan Mercik  
Performance Based Tests and Self-Report of Subjects After Anterior Cruciate Ligament Injury: Surgical vs. Non-Surgical Management

Thomas M. Mohr  
A Study of the Effects of Plyometric Training Shoes on Vertical Jump Height and Electromyographic Activity

Heather M. Murray  
Kinesiotaping, Muscle Strength and ROM After ACL Repair

Maura F. O'Shea  
Functional Retraining of a Patient with Chronic Low Back Pain Utilizing a Multidisciplinary Pain Management Program

Lori A. Patrick  
Differences Between Runners and Non-Runners in Foot and Lower Extremity Posture

Christopher J. Potts  
The Effect of the Pilates Method Mat Exercises on Chronic Low Back Pain, Abdominal Strength and Postural Measurements

Cheryl L. Riegger-Krugh  
Customized Assistive Device for Posture and Locomotion for a Dog with Cerebellar Ataxia

Leslie L. Rose  
Pre and Post Operative Rehabilitation of a Patient with a Reverse Bankhart Lesion: A Single Subject Case Report

Sheri P. Silfies  
Reliability of Surface Electromyographic Amplitude and Fatigue Parameters of Back Extensor Muscles in Healthy Adults

Alexander G. Urfer  
A Study of the Incidence of Upper Extremity Overuse Syndrome and Associated Factors in Sign Language Interpreters for the Deaf

## PLATFORM PRESENTATIONS

### THURSDAY

Session A: 12:00 - 12:20 PM  
Todd A. Watson  
The Relationship Between Whiplash Onset and the Development of Shoulder Impingement: A Research Report

Session A: 12:20 - 12:40 PM  
Margaret Jane Loureiro  
Physical Therapy Profile of Patients with Cervicogenic Dizziness

Session A: 12:40 - 1:00 PM  
Martin J. Kelley  
An Examination Sign to Identify the Presence of A Spinal Accessory Nerve Palsy

Session A: 1:00 - 1:20 PM  
Amy R. Freund  
The Effects of Cervical Retraction Exercises on Forward Head Posture and Cervical Range of Motion

Session A: 1:20 - 1:40 PM  
Gary C. Zigenfus  
Effectiveness of Early Physical Therapy in the Treatment of Acute Low Back Musculoskeletal Disorders

Session A: 1:40 - 2:00 PM  
Sharon B. Young  
The Sacroiliac Joint: Comparing Physical Examination and Diagnostic Block Arthrography

Session A: 2:00 - 2:20 PM  
Gary M. Souza  
EMG Activity of Trunk Muscles During Specific Spine Stabilization Exercises

Session A: 2:20 - 2:40 PM  
Emily J. Everson  
Comparison of Abdominal Muscle Activity Elicited From Four Different Curl-Up Positions: An EMG Study

Session A: 2:40 - 3:00 PM  
Mark Werneke  
Role of the Centralization Phenomenon as a Prognostic Factor for Chronic Pain or Disability

Session A: 3:00 - 3:20 PM  
Jennifer M. Neroda  
Documenting Innominate Superior Shear Dysfunction and Efficacy of Limited Treatment on Pain and Disability

Session A: 3:20 - 3:40 PM  
Daniel L. Riddle  
Alignment of The Sacroiliac Joints in Patients Evaluated for Sacroiliac Dysfunction: A Multi-Center Intertester Reliability Study

Session A: 3:40 - 4:00 PM  
Julie M. Fritz  
The Use of a Classification approach to Identify Subgroups of Patients with Acute Low Back Pain: Inter-Rater Reliability and Short-Term Treatment Outcomes

Session A: 4:00 - 4:20 PM  
Julie M. Fritz  
The Relationship Between Waddell's Nonorganic Signs and Changes in Patient-Reported Disability with Physical Therapy Treatment

Session B: 12:00 - 12:20 PM  
Elizabeth Falcone  
The Relationship Between Impairment and Disability in Individuals with Low Back Pain

Session B: 12:20 - 12:40 PM  
Gregory E. Hicks  
The Reliability of Clinical Examination Measures Used for Patients with Suspected Lumbar Segmental Instability

Session B: 12:40 - 1:00 PM  
Ronald F. Bybee  
The Degree of Assessment Reliability Using the Mckenzie Method

Session B: 1:00 - 1:20 PM  
Michael McKeough  
Effectiveness of Proliferant Injections in Reducing Pain and Disability in Subjects with Chronic Pelvic Girdle Hypermobility due to Ligamentous Instability

Session B: 1:20 - 1:40 PM  
David F. Levine  
Three-Dimensional Analysis of Lumbar Lordosis During Running on Level, Uphill, and Downhill Conditions

Session B: 1:40 - 2:00 PM

Mary V. Keely

Relating Delay of Physical Therapy Intervention to Perceived Outcome in Patients with Low Back Pain

Session B: 2:00 - 2:20 PM

Tarek M. Hussein

The Relationship Between Gait Parameters And Disability In Subjects With Low Back Pain

Session B: 2:20 - 2:40 PM

Frank J. Fearon

Investigating Physical Therapy Treatment Outcomes for Patients with Shoulder Pathology: Is Reimbursement Type a Factor?

Session B: 2:40 - 3:00 PM

Lori A. Michener

American Shoulder and Elbow Surgeons Standardized Shoulder Assessment Form: Reliability, Validity, and Responsiveness

Session B: 3:00 - 3:20 PM

Paula M. Ludewig

Three-Dimensional Analysis Of Shoulder Position In Construction Workers Performing A Drilling Task

Session B: 3:20 - 3:40 PM

Susan HN Jenó

Isolation And Identification of Proteoglycan in Human Glenohumeral Joint Capsule

Session B: 3:40 - 4:00 PM

Ar-Tyan Hsu

Immediate Mechanical Effects of Anterior-Posterior Glide Movement on Glenohumeral Abduction—a Fresh Cadaver Study

Session B: 4:00 - 4:20 PM

Teddy W. Worrell

An Attempt to Determine Prognostic Factors for Patients with Lateral Elbow Pain

## FRIDAY

Session A: 8:00 - 8:20 AM

Gregory P. Ernst

The Relationship Among Hip, Knee, and Ankle Extensor Moments and Vertical Jump Height in Uninjured Subjects and Patients Following ACL Reconstruction

Session A: 8:20 - 8:40 PM

Laura A. Frey Law

Patient Satisfaction Survey of a Custom-Fit Unloading Brace for Knee Osteoarthritis

Session A: 8:40 - 9:00 AM

Judy L. Foxworth

Effectiveness of Unilateral Treadmill Training In Restoring Gait Symmetry Following Knee Arthroscopy in Adults

Session A: 9:00 - 9:20 AM

Suzanne D. Corbett

The Effect of McConnell Taping on Patellofemoral Dysfunction

Session A: 9:20 - 9:40 AM

Mira H. Mariano

The Effects of the Protonics® System on Perceived Pain and Lower Extremity EMG Activity During Functional Activities in Patients with Patellofemoral Pain

Session A: 9:40 - 10:00 AM

Michelle A. Wellen

Rehabilitation of the Autologous Cartilage Transplant Patient

Session B: 8:00 - 8:20 AM

Dorsey S. Williams

A Comparison of Kinematic Variables During Running Across Genders

Session B: 8:20 - 8:40 AM

David R. Sinacore

Foot Impairments in The Elderly: Results of a Community Screening

Session B: 8:40 - 9:00 AM

Nancy E. Henderson

Modalities and Stretching Versus use of an Orthosis in the Initial Treatment of Plantar Fasciitis

Session B: 9:00 - 9:20 AM

Sharon Hayden

Effect of Four Prosthetic Feet on Reducing Plantar Pressures in Diabetic Amputees

Session B: 9:20 - 9:40 AM

Joan E. Edelstein

Effect of Selected Prosthesis Weights on the Time-Distance Variables of Gait in Adults with Unilateral Transtibial Amputations

Session B: 9:40 - 10:00 AM

Mark W. Cornwall

Three-Dimensional Movement of the Midfoot During Normal Walking

## SATURDAY

Session A: 1:00 - 1:20 PM

Thomas G. McPoil

Use of Medial Longitudinal Arch Height to Predict Plantar Surface Contact Area During Walking

Session A: 1:20 - 1:40 PM

Mary K. Allen

Shoe Orthotic Treatment Following a Second Metatarsal Stress Fracture: A Case Study

Session A: 1:40 - 2:00 PM

J. B. Barr

Use of Gait Lab Data to Guide Treatment and Improve Compliance in a Patient with a Transfemoral Amputation and Lumbar Pain

Session A: 2:00 - 2:20 PM

Ryan T. Girrback

Flexural Wave Propagation Velocity and Bone Mineral Density in Females with Tibial Bone Stress Injuries vs. Age-Matched Controls

Session A: 2:20 - 2:40 PM

Perri E. Cagle

Reasons for Exercise Adherence or Non-Adherence Among Individuals with Rheumatoid Arthritis

Session A: 2:40 - 3:00 PM

Holly J. Daniel

Medical History Profile of Physical Therapy Outpatients in Hospital-Affiliated Clinics in Western North Carolina

Session B: 1:00 - 1:20 PM

E. Dobrzykowski

Response Consistency in Patient Self-Report of Health Status

Session B: 1:20 - 1:40 PM

Diane U. Jette

Functional Status in Patients with Musculoskeletal Impairments

Session B: 1:40 - 2:00 PM

Chiung-Yu Cho

Musculoskeletal Symptoms and its Association with Psychological Burdens in Senior High School Students

Session B: 2:00 - 2:20 PM

Mary K. Milidonis

The Impact of Impairments on Professional Care Visits for Person with Arthritis

Session B: 2:20 - 2:40 PM

Dennis L. Hart

Orthotics and Prosthetics National Office Outcomes Tool (OPOT): Initial Reliability And Validity

Session B: 2:40 - 3:00 PM

Dennis L. Hart

Assessment of Unidimensionality of Physical Functioning in Patients Receiving Therapy in Acute, Orthopedic Outpatient Centers

# FOOT ANKLE

## SPECIAL INTEREST GROUP ORTHOPAEDIC SECTION, APTA, INC.

### Greetings Everyone!

The Executive Committee of the FASIG has been busy over the past few months putting the final preparations together for the upcoming foot and ankle education program at the Combined Sections Meeting (CSM) in New Orleans. We are extremely excited about the preconference course that will be held on Tuesday and Wednesday. This preconference course should provide those in attendance with an in-depth overview of the management of foot and ankle disorders associated with rheumatoid arthritis, diabetes, and sports/orthopaedic injuries. Please take the time to read the information I have provided in this report as well as the advertisement in this issue of *Orthopaedic Practice*, found on page 25.

Mark Cornwall, FASIG Vice-President has done an outstanding job organizing the FASIG education program that will be held on Friday afternoon beginning at 12:30 p.m. This series of patient presentations will begin with Susan Appling presenting a case study on plantar fasciitis that illustrates how the *Guide to Physical Therapist Practice* can be used in the evaluation and management of the patient. Joe Shrader will follow with a case study illustrating the management of a complicated rheumatoid arthritic patient. After these 2 case studies, a panel discussion will follow on the use of footwear and foot orthoses in the management of 3 specific case studies. The format for this panel discussion will be the short presentation of a specific patient followed by comments from the panel regarding how they would manage the patient using either footwear or foot orthoses. After the panelists have had a chance to comment on the specific case, an open forum will follow to permit comments and discussion from the audience. The panelists will include Susan Appling, Michael Mueller, Jim Birke, Joe Shrader, and Mark Cornwall. We hope that this format of case studies and panel discussion will provide those in attendance with numerous management ideas, as well as the opportunity to contribute their own thoughts on patient management.

Immediately following the Friday afternoon programming, the FASIG will hold its annual business meeting starting at 5:00 p.m. In addition to officer and committee reports, we will also be electing a Vice President and 2 nominating committee members. Nancy Henderson

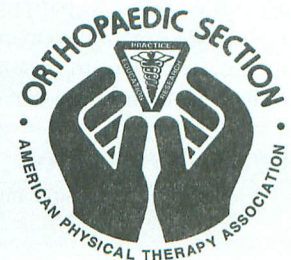
and the nominating committee are currently working to develop a list of candidates for the 3 above positions. Mark Cornwall has consented to running again for Vice President. We still need, however, at least one individual to run for the nominating committee. If you are interested in running for these positions, please contact Nancy Henderson (253-968-2035) or me (520-523-1499).

I would like to acknowledge the outstanding contributions made by outgoing *FASIG Vice President Mark Cornwall* as well as *Nominating Committee member Nancy Henderson*. Having such outstanding individuals involved with the FASIG is what makes our interest group so successful.

As I mentioned in my last column, I would like to see the FASIG develop a survey that would be distributed to the Orthopaedic Section membership and used to establish a database of physical therapists who are currently providing various levels of foot and ankle care. In addition to gaining insight into the number of therapists actively involved in providing foot and ankle services, the information obtained from the survey would be used in developing a referral data base of physical therapists who can provide various levels of foot and ankle care. Steve Reischl has agreed to chair a subcommittee to develop a draft copy of this survey. The current plan is have a draft copy of the survey to present to the FASIG membership for approval at the business meeting at the New Orleans CSM, so that the survey could be distributed during the spring of 2000. If any of you are interested in serving on this survey development committee, please contact me.

The FASIG, in conjunction with the Orthopaedic Section, is tentatively sponsoring a second 2½-day Foot & Ankle Seminar in the Chicago, IL area, during October 2000. More information will be provided as final details are completed.

Irene McClay and Mark Cornwall have finalized plans for the first ever FASIG sponsored "research retreat" to help facilitate the development of a physical therapy body of knowledge in the foot and ankle, both from clinical and basic science standpoints. The theme for this 2-day retreat is



the "static and dynamic classification of the foot." The purpose of this retreat is to provide a forum for discussion on research topics related to the foot and ankle with the goal of providing the physical therapy community with a direction for future research. The objectives for this first ever retreat include: 1) discuss the functional and clinical significance of anatomical variations in the subtalar joint; 2) discuss previous and current research efforts to develop a static classification or alignment scheme to predict dynamic foot movement; 3) discuss previous and current research efforts to dynamically classify the foot using parameters such as motion magnitude, timing, etc; and 4) discuss research focused on the relationships between static and dynamic foot function. The format of the retreat will be one-hour podium presentations by the primary speakers, followed by small group discussions. The primary speakers include Jan Bruckner, PhD, PT, Howard Hillstrom, PhD, Mark Cornwall, PhD, PT, CPed, and Tom McPoil, PhD, PT, ATC. A limited number of participants will also be given the opportunity to present related research in 10 to 15 minute podium presentations. Abstracts of all research presented will be distributed to all retreat participants. This FASIG sponsored research retreat represents a critical step in the development of a scientific foundation for the examination and treatment of the foot and ankle. I cannot thank Irene and Mark enough for their hard work in getting this retreat off the ground. It promises to be an exciting event!

Finally, in this issue of *Orthopaedic Practice* I have again included a short foot and ankle case study for you to review and comment on. Hopefully this will stimulate discussion and debate regarding foot and ankle evaluation and management. If you would like to submit a foot and ankle case study for a future issue of *Orthopaedic Practice*, please do not hesitate to contact Mark Cornwall or me.

In closing, I encourage all of you with an interest in the Foot and Ankle to get involved in the FASIG. The success of the FASIG is directly related to the involvement of the membership, so I encourage each of you to be an active supporter of the FASIG by attending not only the education sessions but also the business meeting as well. If you have any suggestions or comments regarding the FASIG, please do not hesitate to contact me. See you in New Orleans!

*Best Regards - Tom McPoil*

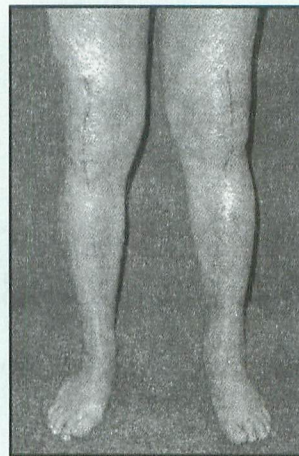
### FOOT & ANKLE CASE STUDY

*Thomas McPoil, PhD, PT, ATC*

The following case study illustrates the difficulty in managing a patient who has undergone an ankle fusion. In this particular case, the patient had also just recently had bilateral total knee replacements. Thus, the importance of assisting the patient to regain the ability to ambulate and bear weight on both lower extremities was critical.

### PATIENT HISTORY

G.B. is a 76-year-old male complaining of left ankle pain



following a fusion to the left talocrural joint. The patient states that he has had problems with his left ankle all his life as a result of repeated ankle sprains playing football in high school and college. As a result of these repeated left ankle sprains, the patient notes that he has always had an "enlarged" left ankle joint. Approximately 12 years ago, he began playing tennis upon retirement. As a result of playing tennis, his left ankle

often felt tired and at times mildly sore. He was referred by his family physician to a podiatrist who prescribed foot orthoses. After using the foot orthoses for approximately 3 weeks, his left ankle no longer felt tired nor had any pain after playing tennis. He used the foot orthoses at all times and continued to play tennis on a regular basis for several years without any pain or discomfort in the left ankle. Approximately 5 years ago, he suffered a severe sprain of his left ankle during a tennis match. The pain was quite severe so he saw his family physician who ordered x-rays of the left ankle that were negative. His family physician referred him to an orthopedic surgeon who felt that no further treatment for the sprain was necessary. At the patient's insistence, however, the orthopedic surgeon did agree to inject the ankle joint with cortisone. While the patient noted that the injection did decrease some of his ankle pain, he still had pain and could not play tennis. He then returned to the podiatrist who had made his original pair of foot orthoses. The podiatrist modified the patient's orthoses and after wearing the orthoses for several days, the patient's symptoms completely resolved. In addition, he obtained an ankle brace that he wore with his foot orthoses when he played tennis. For the next 4 years, the combination of the foot orthoses and the left ankle brace permitted him to continue his normal activities including tennis without any pain or discomfort in the left ankle.

Approximately 16 months ago, the patient reported that both his knees become quite painful and swollen. He noted that he had always been bow-legged and had arthritis in both knees for many years that he also attributed to playing football. When the pain became so severe that he could no longer play tennis or walk long distances, he went to another orthopedic surgeon who suggested total joint arthroplasties for both knees. While initially the surgeon only wanted to do one knee at a time, the patient





convinced the surgeon to perform the total joint replacements on both knees at once. The surgeries were performed on April 22, 1999, and the patient remained in the hospital for 4 days. He was then transferred to a skilled nursing facility (SNF) for 7 more days and was then discharged home. He received daily physical therapy in the hospital and SNF as well as physical therapy at home for 3 weeks. One month post-op, he was able to walk using only a single cane for his first follow-up visit with his orthopedic surgeon since his release from the SNF. Three days later, however, while walking using the cane he felt a severe pain in his left ankle similar to the intense pain he had 10 years earlier. He could no longer walk with his cane and was forced to use a walker because of the ankle pain. He again saw his orthopedic surgeon after the pain did not resolve and actually worsened over the next 2 weeks. The orthopedic surgeon decided to perform exploratory arthroscopic surgery on the left talocrural joint on June 17, 1999, approximately 2 months from the date that the bilateral total knee surgeries were performed. The pre-operative diagnosis was left ankle arthritis. After exploring the left talocrural and distal tibiofibular joints, the orthopedic surgeon determined that a fusion of the left talocrural joint was necessary based on the amount of articular surface degeneration. The fusion was accomplished by removing all articular cartilage to expose subchondral bone and by passing 3 screws through the distal tibia and the body of the talus, to the fibula. The surgeon noted on the post-op report that the subtalar joint was not penetrated by the screws and that the left talocrural joint was fixed in a plantargrade position.

Postoperatively, the patient's left leg was casted from the toes to just below the knee joint. The patient reported being nonweight bearing for eight weeks and was forced to use a wheel chair throughout the entire period. The cast was removed after 8 weeks since a solid fusion of the left talocrural joint had occurred. The patient was instructed by his surgeon to begin bearing weight on the left foot gradually. Any attempts by the patient to bear weight on the left foot, however, caused a sharp pain in the anterior aspect of the left ankle as well as in the left medial longitudinal arch region. The orthopedic surgeon told the patient that this type of pain should be expected since the total knee replacement procedures had "straightened-out" his knees from their original "bowed" position and the foot had to adjust to this new lower extremity alignment. After 2 weeks of attempting to bear weight on the left ankle, the patient could still not bear weight on the left foot without causing severe pain in the anterior ankle and midfoot regions. In addition, the foot had become quite swollen and he now complained of pain under the lateral plantar aspect of the left foot after attempting to ambulate short distances using a cane. On a return visit to orthopedic surgeon, he was referred to physical therapy for evaluation and management of his left ankle pain.

## SIGNIFICANT FINDINGS FROM THE PHYSICAL EXAMINATION

- The patient reported to physical therapy using a wheel chair. He noted that his old foot orthoses made his left ankle feel slightly better but that they were too hard (his old orthoses were fabricated using a rigid plastic material) and he felt like he needed more support to his arch. Marked edema was noted in the left foot and ankle. The patient noted that he spent most of the day just sitting and was not elevating his feet. He was wearing a pair of mid-cut tennis shoes since they were the only shoes he had that could accommodate his swollen left foot. The tennis shoes were determined to have only a 1/2 inch heel.
- When asked to walk, he could only walk approximately 25 feet using a single cane before he had to sit down because of left ankle pain. He reported that the pain was in the anterior aspect of his ankle and in the medial longitudinal arch region of his left foot. He also reported that after he walked a short distance, he felt discomfort over the lateral plantar aspect of the left foot. He was observed to walk with a marked antalgic gait pattern secondary to limited weight bearing on the left foot.
- When asked to stand, the medial longitudinal arches of both feet were observed to have a low profile in resting standing posture. The patient, however, could not load the medial aspect of the plantar surface of his left foot. To determine if the patient could undergo foot pronation beyond resting standing posture, both lower legs were passively internally rotated while the patient remained standing. No further foot pronation was noted in the left foot, while a slight amount of pronation beyond resting standing posture was observed for the right foot. In addition, there was apparent muscle guarding in the left foot.
- The active knee range of motion was 0° to 110° on the left and 5° to 105° on the right. The patient reported that he had no pain in either knee. No signs of knee effusion were noted using the ballotable patella test.
- When the patient was standing barefoot and in his tennis shoes, the left knee was forced into an extended position secondary to the plantarflexed position of the left ankle joint.
- Left calcaneal inversion and eversion were limited by 70% in comparison to the right. Left midfoot abduction-adduction and inversion-eversion were limited by 40% in comparison to the right. The left talocrural joint was fused in a 15° plantarflexed position, if the midfoot was prevented from pronating during the measurement. If the midfoot was allowed to pronate (medial longitudinal arch maximally flatten), then the left talocrural joint appeared to be fused in a 10° plantarflexed position. Range



of motion of the right talocrural joint was 8° for dorsiflexion (knee extended) and 40° of plantarflexion.

- A leg length discrepancy (LLD) with the right leg 3/8 inch shorter than the left was determined using both a tape measure with the patient supine as well as in standing.

### ASSESSMENT

The patient was attempting to bear weight on a left ankle joint that was fused in approximately 15° of plantarflexion. To accommodate this degree of fixation, a shoe would need to have a heel with at least a height of 1 inch. When the patient attempts to ambulate barefoot or using his tennis shoes that only had a 1/2 inch heel, the lack of accommodation for the left ankle fused in plantarflexion causes increased stress at the anterior aspect of the left talocrural joint as well as compensation in the left medial longitudinal arch. The cause of the foot and ankle edema would appear to be due to a lack of plantarflexor muscle activity when walking, thus reducing the degree of venous return as well as the constant dependent position of the left lower leg during the day. Furthermore, the lack of midfoot and rearfoot mobility in addition to the foot edema prevented the patient from fully loading the medial plantar aspect of the left foot. When the patient attempted to ambulate, even for short distances, his inability to load the medial aspect of the foot caused increased loading under the lateral plantar aspect of the left foot.

Since the patient had already received 25 physical therapy visits for his post-total knee rehabilitation, his insurance company only authorized 2 physical therapy visits for his current condition. Thus, his wife was instructed in several interventions that were included as part of the patient's home program.

### MANAGEMENT PROGRAM

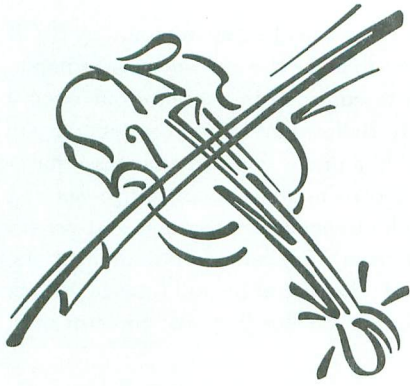
- To help control the left lower leg and ankle edema, the patient was instructed to elevate his leg at all times when sitting. He was also given a piece of theraband to place over the ball of his foot and toes and instructed to wiggle his toes up and down as well as make a circle with his toes at least 10 minutes, every hour to stimulate venous return.
- The patient's wife was instructed in massaging the patient's left foot and ankle, while the lower extremity was elevated, from a distal to proximal direction at least 3 times a day for 10 to 15 minutes. In addition, to increase joint movement in the midfoot region, his wife was instructed to both sweep and perform dorsal-plantar glides of the left metatarsals.
- Since his current footwear could accommodate the edema in his left foot, he was instructed to continue using the same shoes. To support his medial longitudinal arch and to accommodate for the low heel height of the shoe, a pair of ProOption (UCO International, Prospect Heights, IL) prefabricated foot orthoses were placed under the patient's feet while he was standing in resting standing posture. While standing, precut 6 mm wedges (6 centi-

meters wide) were placed under the heel region of the foot orthoses until the patient reported that the pain in the anterior aspect of the left ankle was relieved. The patient required 3 wedges or 18 mm while standing barefoot for complete relief of his anterior ankle pain. Since the shoe only had a 6 to 8 mm heel height, a 12 mm heel lift was added to the left orthoses and a 18 mm lift was added to the right. The extra 6 mm heel lift for the right orthoses was to accommodate the LLD previously noted. To provide increased cushioning for the plantar surface of his feet, a 4 mm DuoLite top cover (full length) was then adhered to the ProOption orthoses. Since the patient was not able to completely load the medial aspect of the left foot, a temporary medial wedge was placed under the medial forefoot region of the left foot orthoses. The amount of wedging was determined by placing precut wedges under the medial forefoot region of the left orthoses while the patient was standing. It was determined that a 3 mm wedge was required. Since the wedge would only be utilized until the mobility in the patient's left midfoot and rearfoot increased, it was secured to the bottom of the left foot orthoses using double-sided adhesive tape. The completed orthoses were placed in the patient's footwear and he was asked to walk. He noted immediate improvement in both his left anterior ankle and medial longitudinal arch pain while ambulating.

- The patient was instructed to increase his walking distance gradually with weight-bearing as tolerated on the left ankle, using either a walker or cane.
- He was scheduled for a return visit in one week.

### FOLLOW-UP

- 1 WEEK
- Patient walking without pain or discomfort in the left ankle 200 feet with walker and 50 feet with single cane. Decreased edema observed in the left lower leg and ankle with a slight increase in midfoot and rearfoot mobility also observed.
- 3 WEEKS
- Patient walking without pain or discomfort in the left ankle for 200 feet using single cane. No longer requires use of walker. Minimal edema observed in the left ankle. Improvement in midfoot and rearfoot mobility observed. As a result of the increased foot mobility and reduced edema, when asked to stand barefoot the patient was able to fully load the medial plantar aspect of the left foot. Based on this finding the medial forefoot wedge was removed from the left foot orthosis.
- 6 WEEKS
- Patient walking 500 to 700 feet daily without the use of a cane. Reports no pain or discomfort in the ankle or midfoot regions. Left calcaneal inversion and eversion now limited by only 50% in comparison to the right. Left midfoot abduction-adduction and inversion-eversion only limited by less than 20% in comparison to the right. Range of motion of the right talocrural joint and both knees remained unchanged.



# Performing Arts

SPECIAL INTEREST GROUP



ORTHOPAEDIC SECTION, APTA, INC.

## President's Message

Fall is definitely in full swing, and many of us are involved in completing our annual dance screenings. Wouldn't it be nice if the PASIG could generate standardized dance and music screenings? Standardized screening has multiple benefits. First, those of you becoming involved in screening projects for the first time do not have to reinvent the wheel. Second, we could start comparing data across dance and/or music populations, which may increase the usefulness of screening results for each of our particular populations.

In addition to standardized screenings, several of you have brought another item to my attention that bears thinking about. Many of us provide backstage physical therapy services to companies on tour (dance, musical theater, orchestra). In such circumstances, we are acting very much like an athletic trainer, and we usually have a "team" doctor who has a prescribed general physical therapy services. We may provide these services as a company comes through our locale, or we may actually be on tour with the company. Multiple practice issues are involved in providing backstage PT services. We are certainly the profession of choice to provide touring performers with health and wellness services. However, does the backstage provider model square with out of state practice acts? Should a PT on tour have a license in every state that the company has a gig, or does a license in the home state suffice? Does the global prescription for services from a "team" doctor adequately cover our need for a referral in nondirect access states? I raise these questions because they have been raised to me. I think these issues warrant discussion by the membership because it is important that we secure our professional right to provide backstage PT services without having to operate in the "shadows."

If you have any comments about the above discussion items, please email me at [Jenn526@aol.com](mailto:Jenn526@aol.com). These are just some of the issues that we will be discussing at the business meeting at CSM 2000 in February. I encourage all of you to attend and to participate in a lively debate about the future of performing arts physical therapy.

*Jennifer M. Gamboa, PASIG President*

## Miami City Ballet

*Cynthia McGee, MSPT, LMT*

Miami City Ballet's (MCB) medical and physical therapy programs have changed significantly over the past several years. In 1995, the company found itself in a situation with little regular physical therapy care, and no therapist close enough to the company who the dancers could see in an emergency. The company sought to have a local therapist who would come to the studio on a regularly scheduled basis, and who would also be easily accessible to the dancers even when not in the studio. I had recently been working with artistic director Edward Vilella through his rehabilitation of his left hip total arthroplasty, and was asked by Mr. Vilella to become the company's regular therapist. For the remainder of the 1995-96 season, and for the following 2 seasons I worked with the company 4 hours per week (spanning over 2 days) and helped to cover (with the company massage therapist) all South Florida performances. Physical and massage therapy was administered at the ballet studios, with equipment that included a treatment table, ultrasound and electrical stimulation machines, a supply cabinet, and one Pilates Reformer. Any dancers who had problems which could not be adequately addressed at the studio were able to see me at a nearby PT clinic, Miami Beach Sportsmedicine, either for no charge or via a worker's compensation claim, if their problem necessitated a greater level of care. I acquainted myself with the orthopaedic surgeon working with the company, Mark Sinnreich, MD, and enlisted the interest of Steven Kringold, DPM and Michelle Detweiler, DPM to become the company's official podiatrists. I have a background in classical ballet as well as in the martial arts, but in an effort to better serve MCB's dancers and expand my knowledge in the realm of dance medicine, in 1998 I completed my certification in Pilates-based rehabilitation through Polestar Education under Brent Anderson, PT, OCS and Elizabeth Larkem, MA, Feldenkrais® Practitioner. In late 1998 I also began training towards eventual certification in Gyrotonics under Angela Crowley, CMT, NMT, GCFP.

This level of care was certainly higher than the company had experienced in the past several seasons, but an increasing rate of injury, as well as a growing dancer roster (close

to 50 dancers), was making it apparent that the existing medical program was becoming inadequate for a company this size and of this caliber. Also, worker's compensation utilization had sharply increased in the 1997-98 season, causing financial concern for the company. Brent Anderson had recently moved to Miami to seek his Ph.D. in physical therapy at the University of Miami, and had demonstrated interest in getting involved with Miami City Ballet's medical program. Together Brent and I consulted with MCB's artistic, administration, and finance departments and proposed an entirely new medical program that would incorporate yearly dancer screenings, completely in-house PT services, direct payment of medical expenses, and formation of a safety team (consisting of dancer representatives, company therapists, and representatives from the artistic staff as well as administration and finance). The program's main tenet was to provide the company with the best medical and physical therapy care possible as well as to decrease worker's compensation utilization and therefore worker's compensation costs. When the new proposal was accepted by both MCB and our WC insurance carrier, Brent and I, as well as the rest of MCB's staff set off to make it happen.

With more than double the hours of in-studio physical therapy coverage now, Brent and I were able to provide a greater level of physical therapy care, monitor the course of dancer's problems more effectively, and begin to train the dancers in injury prevention. In the 1998-99 season MCB incurred zero worker's compensation claims for dancers, an accomplishment of which the entire company is proud. Hopefully the company will continue on this trend of zero worker's compensation utilization, thus being able to benefit financially from a decrease in worker's compensation insurance premiums. The savings can be passed on in enhancements to the new medical program as well as to the entire company.

Therapy at the studio is still being administered in our small therapy room with no air conditioning, now equipped with Pilates props, but we are looking forward to moving into MCB's brand-new multimillion dollar facility. Construction is still being completed, but the anticipated move-in date is Fall 1999. In the new facility we will have a large (air-conditioned!) state-of-the-art therapy room which will be outfitted with the complete complement of Pilates apparatus as well as a Gyrotonics Expansion System, cardiovascular conditioning equipment, a whirlpool, small props, and an array of other physical therapy and conditioning equipment.

Even though we experienced great first-year success with our new medical program, we hope to make continued improvements on a yearly basis. In this coming season we will be implementing regular educational meetings with the company dancers, injury prevention initiatives including therapeutic and conditioning classes, weekly safety team meetings, better backstage coverage (with a physical therapist present at every show), physical therapy and conditioning equipment that travels with the company on tour, and improved regulation of on-tour medical and physical therapy

coverage, with possible coverage of company tours by MCB therapists. Our goals are to make the aforementioned implementations, as well as to continue to decrease our overall injury rate. Miami City Ballet is an incredible company to work with. Brent, myself, and our company massage therapist, Steve Grogg, are continually committed to making positive change through our medical program, and we see the same commitment from our dancers, doctors, artistic staff, and departments of administration and finance. I look forward to another exciting, challenging, and fun season of classical dance.





# Pain MANAGEMENT

SPECIAL INTEREST GROUP • ORTHOPAEDIC SECTION, APTA, INC.

## TRENDS IN PAIN MANAGEMENT

Do magnets really work for managing pain or are they merely a placebo? An article in the *Physical Therapy Bulletin* dated January 25, 1999 reported magnet-laden socks being used to reduce the neuropathic symptoms of burning, numbness, and tingling in the feet of patients with diabetes. The symptoms were dramatically reduced in 90% of the patients with the magnetic socks, while only 33% of the control group reported improvement over this same time period. However, it is quoted that the symptoms returned when the magnets were removed.

On June 14, 1999, the San Diego Union ran an article called "Magnetic Therapy Is Becoming An Alluring Force." This story discussed the efficacy of magnets based on clinical studies and satisfied patients. In the article, pro golfer Jim Culvert "couldn't play golf without wearing his magnets." The Miami Dolphins, a pro football team, stated they cover their game bench with magnetic pads to lessen the pain from their injuries. Ron Lawrence, MD, President of the North American Academy of Magnetic Therapy was quoted in the article as saying "people are drawn to natural therapy that is safe, noninvasive, inexpensive and nonaddictive;" plus "it produces none of the side effects often seen with drugs." Magnets have successfully been used, according to the article, to reduce chronic pain caused by arthritis, carpal tunnel syndrome, headaches, menstrual cramps, tennis elbow, and bursitis, according to Dr. Lawrence. Magnetic therapy is enhanced by adding stress management plans, diet changes, exercise program, acupuncture, and/or vitamin/mineral supplementation. Additionally, "magnetic therapy is to believe to work by increasing blood flow in the capillaries of an affected area which reduces inflammation by speeding up fluid exchange." Other researchers suggest the magnetic fields produce tiny electrical current, stimulate the brain, trigger endorphin release, and/or stimulate the pineal gland to indirectly produce various enzymes. The contraindications listed to magnetic therapy are pregnancy, people using transdermal drug patches, patients with pacemakers or insulin pumps, or following an acute sprain. (I would also add to this mucosis, as a fungus in a magnetic field rapidly grows.) Dr. Lawrence is the author of "Magnetic Therapy, The Pain Cure Alternatives." He practices in Agoura, California.

Another interesting article was in *Advance for Physical Therapists and Physical Therapy Assistants* volume 10, number 20 called "Magnetic Reaction," by Scott Huelskamp. The article discussed more of Dr. Lawrence's approach, the actions of a magnet on increasing blood flow, and the potassium sodium ion exchange that also occurs in the presence of a magnetic field. The magnets described are 40 times greater in strength than your everyday refrigerator magnets. Neodymium is the latest in magnetic development and appears to have a strong magnetic field. The strength of a magnetic field is called gauss. Dr. Lawrence recommends surrounding the area of pain or placing the magnets on the associated acupuncture points.

The *Journal of Rheumatology*, 1993;20:3 reports a "Double-blind trial of clinical effects of pulse magnetic fields in osteoarthritis" by David H. Trock, et al. Results reported an average improvement of 23% to 61% with active treatment while 2% to 18% improvement was noted with the placebo group. No toxicity was observed. The conclusion was that the use of post magnetic pulse is "a potential as an effective method of improving symptoms in osteoarthritis."

I have used magnets and magnetic field therapy in my practice for the past 15 years in treating patients with chronic pain. I too was skeptical at first but with patients reporting less pain, long lasting relief, and improved mobility, some of my skepticism changed. Historically, magnetic therapy has been used for centuries in Asia, Egypt, the Middle East, and Greece. For many hundreds of years, up to the 1800s, it was believed to be "quackery." During the 1900s it was again used with horses and other animals, as a sensation to the stimulus was absent. These horses appeared to respond to the magnetic field therapy by having less pain and improved mobility. In 1994, the FDA gave an "okay" for magnetic field therapy to be used for chronic pain and chronic edema. In conclusion, there is a plethora of articles and websites out there for you to look at on magnetic therapy. Some are good control studies, others are not, and still others are based on anecdotal results. You need to interpret these results for yourself. However, there is a place for magnetic therapy as magnets are readily available through various companies and stores. Magnets are not a cure-all, as they do not cure anything. They do reduce pain and are deemed safe to use at this time.

## NEW MEDICATIONS FOR PAIN

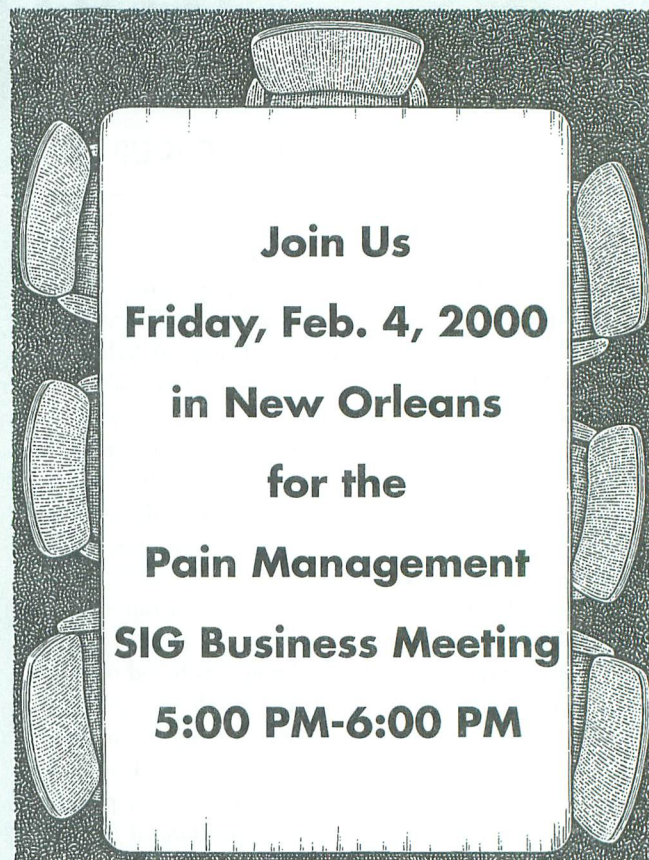
Do you have patients with chronic pain who are not improving? Do they have poor sleep, trouble with memory, and appear depressed? Neurontin (gabapentin), a drug originally tested to treat epilepsy, was found to be effective when used in the treatment of certain types of chronic pain, ie, headaches, fibromyalgia, and shingles (see *Physical Therapy Bulletin*, January 18, 1999). Gabapentin is effective in the treatment of pain and sleep interference associated with postherpetic neuralgia. (JAMA, 1998;280(21):1837 "Gabapentin for the Treatment of Postherpetic Neuralgia" Rowbotham, etc.) This drug appears to interact well with other medications and has few side effects (see PDR). Call your referring physician and discuss its potential use for your patients who do not seem to be getting better.

## NUTRITIONAL SUPPLEMENTS

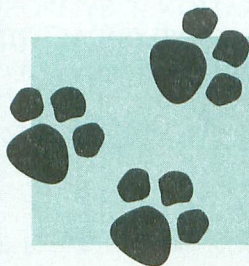
The FDA is reported to be doing a double-blind study on the efficacy of using chondroitin sulfate and glucosamine for the treatment of arthritis. According to the *Orthopedic Technology Review*, 1999 (April/May)1(1) "these items have been used in veterinary medicine for many, many years. Anecdotally, humans have been receiving some benefit from these nutritional supplements. Many patients report less pain, improved function, and less reliance in NSAIDs while taking glucosamine and chondroitin. Robert Schenk, MD, Professor at the University of Texas Science Center, San Antonio, believes "they give symptomatic relief but do not cure a patient. Glucosamine may also be shown to have chondro-protective qualities." The risk of using this nutritional supplement is mostly to the pocketbook. Further research is definitely needed but it may prove an alternative for some of your patients who cannot tolerate NSAIDs or other intervention techniques.

If you have questions or comments regarding any of the items listed above, please contact me through the Orthopaedic Section or at my e-mail address of [painfree@ix.netcom.com](mailto:painfree@ix.netcom.com).

*Tom Watson, PT, MEd*  
*Fellow American Academy of Pain Management*  
*President, Pain SIG*



**Join Us**  
**Friday, Feb. 4, 2000**  
**in New Orleans**  
**for the**  
**Pain Management**  
**SIG Business Meeting**  
**5:00 PM-6:00 PM**



# Animal Physical Therapist SPECIAL INTEREST GROUP Orthopaedic Section, APTA, Inc.



## The Animal Physical Therapist Special Interest Group Directory of Officers & Chairpersons

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### Clinical Competency Coordinator:

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(203) 265-1975

### 1999 Membership Directory:

The Animal Physical Therapy SIG has a membership directory which is available at the Orthopaedic Section office. The cost is \$5.00 for Animal PT SIG members and is available to nonmembers for \$10.00. If you would like to purchase a directory or if you have any questions please contact the Orthopaedic Section at 800/444-3982.

## CALENDAR OF EVENTS

1. Home Study Courses in Canine and Equine Anatomy and Biomechanics for the Physical Therapist are being developed for the year 2000, by Cheryl Riegger-Krugh, PT and Kevin Haussler, DVM. Please contact Kathy Pohja at the Section office at 800/444-3982 ext 213.
2. World Congress 2000 in Amsterdam, April 26 - 29, 2000 for more information contact: Voorjaarsdagen Secretariat, P.O. Box 14031, NL-3508 SB UTRECHT, THE NETHERLANDS, phone 31-(0)30-251-0111 or email: vjd@pobox.ruu.nl
3. Equitana USA will be held in West Springfield, MA, November 11 -14, 1999 for more information contact Equine Affair at (740) 845-0085.

## THE ANIMAL PHYSICAL THERAPIST SIG UPDATE

1. Member and nonmember directories are available through the Section Office. As of January 1999, there are 295 Orthopaedic Section SIG members.
2. State Liaisons: To date there are 32 states that have Animal Physical Therapist SIG Liaisons. They have been asked to collect information on their state practice acts, submit a general information article about the SIG to their chapter newsletters, offer to present a brief presentation about physical therapists to their state veterinary association, and to report back to the SIG by November 1, 1999. Rita Brereton, PT continues to coordinate this nationwide grassroots effort.
3. Jan Richardson will remain as National liaison between the AVMA and the APTA. She will be sending out a few letters to private organizations regarding practice protection.
4. The SIG will be working on a Compendium for Animal Physical Therapy. This document will contain abstracts, and possibly original articles of current research in this field.
5. The Veterinary Physical Therapy Resource Manual by Lin McGonagle is available for purchase, contact Lin McGonagle at (315) 497-0333 or by email: lin@Envisagel.com.
6. We would like to welcome Melissa Folta, PTA who will be acting as the physical therapist assistant coordinator for the Animal Physical Therapist SIG. Any PTAs interested in getting involved may contact Missy by email at beachboy@gr8brdg.net or by phone at (757)428-6645 (h) or (757)496-1800 (w).

**Animal Physical Therapist SIG Executive Summary**  
1997 - 1999 Submitted by Lin McGonagle, PT

The Animal Physical Therapist SIG has achieved many successes over the past 2 years through the team effort of dedicated members and the Orthopaedic Section Officers, Board, and staff.

**Highlights:**

1. Official Formation of the Animal PT SIG - February 1998
2. Membership increases annually.
3. Quarterly Newsletter within *OP* - filling maximum space.
4. SIG Reports to BOD 3x/year.
5. State Liaison Network established in 1998. Representation increases annually. Current liaisons identified in 32 out of 50 states. Network to report back to SIG November 1999.
6. Publicity in PT Magazine and Advance Magazine.
7. Education:
  - CSM February 1997 - Veterinary Physical Therapy: How to Get Started
    - Off Site 2½ day program - October 1998 Equine Physical Therapy I, Cornell University, Ithaca, NY, Amanda Sutton, Chartered Physiotherapist and Lin McGonagle, MSPT
    - CSM 1999 Veterinary Physical Therapy: Canine Physical Therapy, Wes Rau, PT and Equine Physical Therapy - Lesley Kerfoot, PT
    - Off site 2½ day program - June 1999 Canine Physical Therapy I, University of Tennessee at Knoxville, David Levine, PhD, PT, Darryl Millis, DVM, Robert Taylor, DVM, Joe Weigel, DVM and Elizabeth Schull, DVM
    - Home Study Basic Science for Animal Physical Therapists, Canine: Cheryl Reigger-Krugh, PT, Equine: Kevin Haussler, DVM, In progress - available in 2000
8. Informational Meeting CSM 1998
9. First Official Business Meeting 1999
10. Budgets submitted for 1998 and 1999
11. Meetings with Jan Richardson - February 1997 and April 1999
12. Membership Directory February 1999
13. Bylaws prepared May 1999. To be reviewed by Section BOD at CSM, February 2000.
14. Mission, Goals and Vision Statement prepared April 1999. To be reviewed by Section BOD at CSM, February 2000.
15. Active Committees: Public Relations, Education, Nominating, Research and State Liaison.
16. PTA Coordinator established June 1999.
17. Clinical Competency Committee initiated June 1999
18. Potential provider for Malpractice Insurance identified June 1999.
19. Surveys distributed, results compiled and reported to membership.  
1998: General inquiry regarding experience and interest  
1999: Functional Outcomes
20. Attended Section Business Meetings 1997 SME, 1998 CSM and SME, CSM 1999.
21. Presentations to Section Board 1997 SME (during Business Meeting) in San Diego, CA, 1998 SME in Orlando, FL and 1999 CSM in Seattle, WA.
22. Submitted Action Items 1997 - 1999.
23. Plans for "Animal PT Compendium", a compilation of abstracts and possibly original articles relating to physical therapy for animals, initiated in February 1999 by Research Committee.

**THE FIRST INTERNATIONAL SYMPOSIUM ON REHABILITATION AND PHYSICAL THERAPY IN VETERINARY MEDICINE** Submitted by Nancy Murphy, PT

This symposium was held August 7 -11, 1999 at Oregon State University in Corvallis, OR and was sponsored by the college of Veterinary Medicine and Health and Human Performance. Associate Deans Linda Blythe from the College of Veterinary Medicine and Jeff McCubbin from the College of Health and Human Performance organized the conference. This symposium brought together veterinarians, physical therapists, and other multidisciplinary professionals from around the world to explore new directions in the care, prevention, and rehabilitation of injured animals. A group of internationally recognized professionals participated and explored current topics in clinical and basic research in animal physical therapy. There were approximately 325 attendees representing 13 countries.

The list of world-renowned speakers at the 5 day symposium was extensive. The opening program, presented by Lin McGonagle and Amanda Sutton, was entitled "Physical Therapy For Animals: Past, Present, and Future." Two sessions on the second day included "The Scientific Basis: Physiological Changes of Tissues Under Stress" and "Therapeutic Modalities". There were 9 speakers including David Levine and Darryl Millis who jointly spoke on using electrical stimulation on dogs. Mary Dyson spoke on the "Principals of Post-surgical Wound Healing Relevant to Physical Therapy." In the evening there was a poster session, tours of the College of Veterinary Medicine, and Round-Robin Live Animal Demonstrations.

Day 3 completed Session 2 and began Session 3, "Detection and Localization of Tissue Pathophysiology." There were 6 speakers including Allen Schoen who spoke on "Veterinary Acupuncture: Theory and Principles of Application in Rehabilitation" and Robert Taylor who discussed "Diagnostic and Research Assays for Rehabilitation." In the afternoon there were Blanket Topic Sessions at Silver Creek Falls State Park which is located in the foothills of the Cascade Mountains. During one of these sessions an International Animal Physical Therapy group was formed. Further details of this group will be discussed in upcoming newsletters.

The two sessions on day 4 examined "Current Practical Applications of Physical Therapy Modalities in Veterinary Medicine." There were 8 speakers on this day which included topics such as, "Common Injuries and Use of Physical Therapy in Racing Greyhounds in Australia" presented by Jim Gannon. Other topics discussed were "Integrative Physical Therapy in Animal Health" and "Rehabilitation in the Equine Athlete" presented by Gail Wetzler and James Waldsmith, respectively. In the evening the attendees were treated to a delicious banquet of baked salmon followed by a night of country swing dancing.

The final day of the symposium featured a panel discussion considering topics such as the formation of standardized research protocols and education for animal rehabilitation, potential research grants, and the formation of organizations to promote international animal physical therapy. The symposium concluded with research papers and clinical case studies presented by 16 speakers. Geoffrey Clark spoke on both, "Orthotics, Prosthetics, and Ambulatory Carts: Use of Supportive Devices in Canine Patients" and "Traumatic Injury Patterns in Canine Athletes." Kevin Haussler presented a paper on "Segmental Spinal Kinematics and Effects of Chi-



ropractic Adjustments in Horses.”

Thanks to the efforts of Linda Blythe, Jeffery McCubbin, and the many speakers, the First International Symposium on Rehabilitation and Physical Therapy in Veterinary Medicine was a great success. It has yet to be decided when and where the next symposium of this type will be held, but when established it will be posted in this newsletter.

*The following case study is reprinted with permission by the South African Animal Physiotherapy Association's Newsletter: Summarized by Debra Elliot from a talk given by Dr. Ralph Katzwinkle.*

## PAINFUL BACKS - THE WHOLE STORY

### Introduction

“My horse has a sore back?” This is probably the most common complaint, which is presented to the members of the para-veterinary field. As our area of expertise is still growing, it is important to consider the multi-factorial origin of back pain, which is both holistic, but at the same time focused. In the following piece I will review a problem solving approach with a view to a complete evaluation. I will attempt to take the reader from the initial evaluation to the final rehab stage. I will not provide recipes for treatment, rather ideas that can be cultivated.

Over the last year, I have been working primarily with horses that are used for dressage, show jumping, and showing and eventing. The equine athlete has one owner who is usually the rider. This is a great advantage as it gives us the chance to work in conjunction with the rider to help rehabilitate the athlete to its former state. One must remember that it is the rider who knows the horse best.

### Case Scenario

(In the writing the horse will be referred to as “he” and the owner as “she”)

We are presented with a thoroughbred that retired from racing at 4 years of age. He was put onto a spelling farm for approximately a year to rest. He was sold to his first owner who gave him basic schooling for about 2 years. The current owner purchased him when he was 6 years old in view of advancing him in dressage and eventing. The owner first hacked him out for 3 weeks and then started schooling in the arena. After a month of general schooling she started pushing the horse to go down on the bit and compete in novice dressage. He coped fairly well, but often fought the bit. Recently the owner has started shoulder-in work and tried some lateral work. She has found this very difficult, with the horse resisting her leg aides and throwing his head. The owner's complaints are as follows:

- dips his back during grooming
- fusses when you put the saddle on and tighten the girth
- uneven when working
- prefers the left rein
- dips his shoulder on the right rein and hangs on the bit (leans on the fore)
- does not round to the right
- disunited canter on the right rein and starts on the incorrect lead
- not always tracking up (decreased hindquarter engagement)

**Examination:** A thorough examination needs to be performed by the practitioner who should include the following points:

### Subjective

Consultation with the rider/owner, the instructor/trainer and members of the para-veterinary field to rule out any factors which lie beyond our area of expertise.

1. **The Rider:** One consults the rider to obtain her opinion of the horse's problem. Some of the facts are summarized in the above case scenario. It is imperative that the practitioner looks at the manner in which the rider rides her horse. Many riders are one sided and apply their aides more strongly on one side than the other. This can cause the horse to become crooked and resist work on the opposite rein. Some riders drive too hard with their seat instead of using leg aides and injure the horse's back. The rider's position is imperative. The rider must be in balance with the horse and with herself. The ideal position for the rider is with the shoulders, hips, and ankles to be in line. If the rider sits forwards, she is unbalancing the horse and may cause the horse to work on the forehand. If the rider sits backwards, she places more pressure on the back, possibly creating discomfort. One can also look at the manner in which the rider uses her reins. The rider should not rely on the reins as the primary aide. This could encourage a horse to resist the bit and create a high riding neck and consequently an inverted frame. One should ask the rider the nature of the sweat patterns of her horse to establish the primary areas of muscular work.

2. **The riding instructor:** He or she may be able to shed light on the faults of the rider as well as provide valuable insight into the way that the horse uses himself. She will be able to give information on how the horse is being trained.

3. **Veterinary Consultation:** The veterinarian should perform a full examination to rule out any serious bony or ligamentous problems, pathology, possible chemical imbalances, any dental problems, etc.

4. **Farrier:** The farrier should check the feet to correct imbalances that could alter the biomechanics of the horse and thus cause pain or discomfort during schooling.

5. **Saddler:** The saddler can detect whether the saddle may be the cause of the horse's discomfort.

6. **The Chiropractor:** A chiropractor can provide valuable insight into spinal alignment, which could cause pain.

### Objective

Looking at the horse:

- conformation
- symmetry and balance in standing, walking, trotting, cantering, jumping, etc.
- gait abnormalities on the straight in the different gaits
- assessment at the lunge on both reins
- postural assessment of the horse and rider during different gaits and activities
- full palpation of the soft tissues and the joint structures, especially spinal joint and ligamentous stability
- flexion and pivot tests
- stretching and ROM of the neck, limbs, tail, etc.

### Analysis

A thorough look at the points of the subjective and objective examination to develop a comprehensive picture of the horse's problem and to establish a holistic plan of treatment.

### Discussion

The basic premises for treatment are as follows: To decrease pain, to stretch the tight structures and to strengthen the weak structures. The treatment rests strongly on the signs gained

from the evaluation of the horse. I will not discuss the methods of pain reduction in this piece, but concentrate on the latter 2 premises. Referring to the above mentioned case, we can see that the horse is in a state of muscular imbalance and asymmetry, because it prefers one rein and moves with greater ease on this side. Most people are dominant to one side, and that is the same for horses. In this case, however, the dominance may have been forced due to its prior racing career. The thoroughbred above is stronger in its left diagonal, ie, left shoulder stronger and right hind stronger. This can be seen in that he is able to strike off the left rein in the canter, ie, the right hind, and one notices increased tightness in the left fore and the right hind on palpation. This may be a reason that one sees a disunited canter on the right rein. It is also "hollow" to the left, which means that the horse is stiff on its left side and thus resists the right rein. He is able to work with ease on the left rein because these muscles are shortened, but has trouble rounding to the right, because the trunk muscles on the left have difficulty lengthening. He may then dip his right shoulder in, in an attempt to round to the right. Here is where one may also see a tight temporo-mandibular joint on the right as the horse bites down on the bit on the right rein in an attempt to resist the riders commands to round to the right.

In my experience, there seems to be a correlation between back pain and poor abdominal carriage and thus an imbalance that exists between the abdominal muscles and the back muscles. As in the human, the horse cannot use its back effectively as a bridge if the abdominals are not supporting it. This is when you may see a horse with an inverted frame or dipped back. Another muscular imbalance that often exists in thoroughbreds that have raced is between the hamstrings and the quadriceps. The hamstrings are overdeveloped and the quads are underdeveloped. This could cause a decrease in the engagement of the hindquarters during work. Another muscle to remember is the iliopsoas muscles. This is the muscle that is primarily responsible for hindquarter engagement. Further reasons for lack of engagement could be a stiff or painful sacroiliac joint or an uneven pelvis. All of the above discussion points to a horse working unevenly. To address these problems, I find it imperative to actively involve the rider. The rider spends the most time with the horse and knows it the best. A stretching regime should be set up to stretch the tight structures. One can also teach the rider to use pressure points and basic massage to release these tight structures as well as use it for pain relief. Once the horse may be ridden, the therapist and the rider should construct a list of the most important stretches that the rider can use before working the horse. It is also necessary to teach the rider how to check for a painful back after riding and thus monitor the rehabilitation process. The therapist now has the opportunity to rehabilitate the equine athlete to its former state. It is necessary to work out a comprehensive riding rehab program for the horse. It is important to consult the rider and the instructor, as they can provide valuable information with regards to the demands on the horse. I have included basic exercises with this article to help the horse and rider become a balanced symmetrical unit.

### Exercises

It is important to remember that the horse is hollow to the left and that it is difficult for the horse to work on the right rein. During the warm-up, it is preferable if the rider sup-

plies the horse on the easier rein first and then starts on the difficult rein and spends greater time warming up on this rein.

**Lunging:** This must be used with care. Do not use the lunge if the horse has a peripheral joint problem because it will weight-bear unevenly in a circle increasing the impact on the joints. Use the lunge with care when the horse has difficulty rounding. Try to use a free lunge in a large space to increase and decrease the circle's diameter. Include a sloping plane in the lunge. The ascent exercises the muscles of impulsion (concentric and synergistic action of the gluteals and paravertebral muscles), and the descent exercises the abdominal and hip flexor muscles eccentrically. Include cavalettis on the flat to achieve a similar workout.

**Cavalettis:** These are a series of poles on the ground set at intervals to regulate the horse's stride. The horse needs to flex his joint more and use greater impulsion to clear the cavaletti at a trot, thus encouraging engagement and rounding his back in a bascule. The hindquarters, abdominal, and back muscles are strengthened and the horse develops freedom of movement with his legs. The spacing between the poles for average horses is: 3' to 3'6" at a walk and 4' to 4'6" at a trot. This must be adjusted to the horse's comfort. Initially begin with the cavalettis flat, then raise every alternate end progressing to both ends raised. Start with a walk without a rider and progress onto a trot with and without a rider. Use 3 to 5 cavalettis with 8 to 10 passes with the cavalettis reaching a maximum height of 6 to 8 inches. The horse must be exercised long and low with the rider in a balanced half seat.

**Shoulder-ins:** This exercise is used to develop suppleness, straightness, better collection, and engagement. The horse moves forward with his hind feet on the track while he is bent around the rider's inside leg so that his shoulders and forelegs are brought one step to the inside of the track. The outside shoulder is in front of the inside hindquarter and the horse looks away from the direction in which he moves. This exercise allows the horse to step farther under himself with his inside hind-leg. Practice a few steps at a time, gradually increasing it as the horse becomes comfortable with the exercise. This exercise must be done correctly or not at all. An instructor should be present to help. Advise the rider to ride in a light seat during trotting and cantering. The rider can shift between light and normal seat during lesson.

Hacking out is an enjoyable way to improve your horse's movement. Encourage the horse to walk out with a loose, long rein and ride in areas with many hills. Use natural obstacles to weave around and use as cavalettis. Keep the horse balanced and rhythmical during a canter or gallop.

I hope that you may gain valuable ideas from this article and a starting point from which to work. No horse is perfect - there are always subtle faults, which the horse can cope with at a certain level of work. It is when the horse is pushed beyond that level that its coping mechanisms are inept and the subtle faults become problems.



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## Clinical Residency Program Grants

Per the strategic plan statement of support for the APTA clinical residency program credentialing process, the Orthopaedic Section has budgeted \$10,000 in 2000 to assist potential Orthopaedic residency programs. This money will be made available "first come, first serve" in the form of grants designed to cover the APTA credentialing fee. The fee ranges from \$1500 (programs with 1-5 residents) to \$2500 (programs with > 11 residents), so a total of 4-6 grants will be awarded.

### Application Process

1. Within 45 days of sending the completed application to APTA, the Orthopaedic residency program will submit the grant application to the Orthopaedic Section office.
2. The Orthopaedic Section office will send the Orthopaedic residency program a letter stating the grant has been awarded. The residency program should include this notification letter in the APTA application packet, attached to their cover letter.
3. The APTA will notify the Orthopaedic Section office upon receipt of the program application and acceptance to review by the credentialing committee.
4. The Orthopaedic Section will send a check for the program's application fee directly to APTA.

**IMPORTANT:** If the Orthopaedic Section office does not receive APTA's letter acknowledging receipt of the residency program's application within 30 days beyond the announced target date, the residency program will forfeit the grant.

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For further information, contact Bill Boissonnault at 608/265-3340 or email [wg.boissonnault@hosp.wisc.edu](mailto:wg.boissonnault@hosp.wisc.edu)

### ORTHOPAEDIC SECTION, APTA Orthopaedic Clinical Residency Program Grant

#### APPLICATION

Name of Residency Program: \_\_\_\_\_

Program Director:

Name \_\_\_\_\_

Address \_\_\_\_\_

Fax \_\_\_\_\_

Phone \_\_\_\_\_

E-mail address \_\_\_\_\_

Number of residents attending (check one)

1 - 5

6 - 10

11 or more

Application Fee (Check one)

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\$2000

\$2500

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Orthopaedic Section, APTA  
2920 East Ave. South  
LaCrosse, WI 54601-7202

Fax to: Clinical Residency Grants  
608-788-3965

# Request for Recommendations to Serve as a Member of the Finance Committee

The Orthopaedic Section of the APTA needs your input. We are looking for a qualified individual to serve as a member on the Section's Finance Committee. This person must be an Orthopaedic Section member who is willing to serve a 3-year term from June 2000-May 2003. Preferred qualifications include: interest in or knowledge of accrual based accounting, experience with annual budgets and long range budgeting, and experience with short- and long-term investment strategies.

If you would like the opportunity to serve on the Section's Finance Committee or know of a Section member who is interested, please fill in the requested information below and mail to the Section office along with copy of your curriculum vitae.

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If a program wishes to make individual copies of a course for student classroom use, the Orthopaedic Section charges \$115 per year for reprint permission. This price includes an additional copy of the course that can be taken apart for printing. This offer applies to Home Study Courses used as educational resources and does not include continuing education credits. Contact the Orthopaedic Section office at: 800/444-3982 x 213 if you have questions or would like to receive a sample monograph. Do not hesitate to take advantage of this unsurpassed instructional opportunity!

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## PURPOSE:

To initiate students to the Orthopaedic Section, APTA, Inc., and serve as a liaison and/or assist in the transition for the student preparing to enter the profession of physical therapy.

## THE SPONSOR SHALL:

- Assist with introducing the student to the Orthopaedic Section.
- Serve as a role model and a resource for questions.
- Sponsor the student financially by funding a one year membership in the Orthopaedic Section. The cost for student membership is \$15.00.

## QUALIFICATIONS:

The sponsor must be a member of the Orthopaedic Section and interested in promoting the physical therapy profession.

**FOR MORE INFORMATION ON THIS PROJECT, CONTACT THE ORTHOPAEDIC SECTION OFFICE AT 1-800-444-3982.**

## PROCESS:

1. Sponsor will send in Sponsor Application to the Orthopaedic Section office.
2. Office will enter sponsor in computer and send sponsor's application to the PT or PTA program within that sponsor's area (when possible), or to sponsor's school preference if indicated.
3. School liaison will coordinate with the students interested in participating; assisting with matching the student with a sponsor.
4. School will forward student's name to the Orthopaedic Section's office.
5. Orthopaedic Section will notify sponsor of his or her student.
6. Sponsor will contact assigned student.
7. An evaluation form will be sent to student participants and sponsors at the end of one year.

## WHY GET INVOLVED?

To assist students in the transition from PT or PTA school to professional involvement in the APTA and the Orthopaedic Section.

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Other degree(s) earned: \_\_\_\_\_

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- |   |   |   |
|---|---|---|
| 1. Would you be willing to sponsor a student(s) from a different school than the school you listed? | Y | N |
| 2. Would you be willing to sponsor a PTA student?   | Y | N |

AREAS OF EXPERTISE: (please state in 25 words or less)

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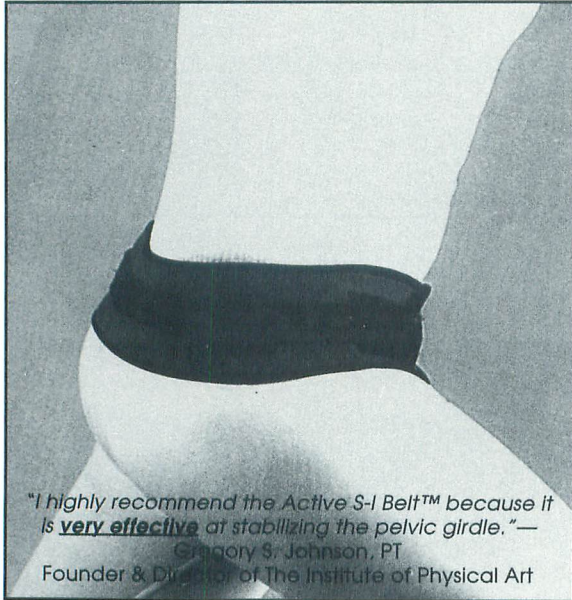
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1. *Orthopaedic Physical Therapy Practice (OPTP)* will publish articles pertaining to clinical practice. Articles describing treatment techniques as well as case studies and reviews of literature are acceptable.
2. Manuscripts should be reports of personal experiences and written as such. Though suggested reading lists are welcomed, references should otherwise be kept to a minimum with the exception of reviews of literature.
3. Two copies of the manuscripts should be submitted along with a 3½" disk with the document saved as Microsoft word or ascii. They should be double spaced, with one-inch margins on each side. The title page should include the author's name, degree, title, place of work, corresponding address, phone and FAX numbers, and email address. The manuscript should be sent to: *Orthopaedic Physical Therapy Practice*, ATTN: Managing Editor, 2920 East Avenue South, Suite 200, La Crosse, WI 54601-7202.
4. Black and white photographs to accompany the texts should be glossy 5x7. A photo release form must accompany any photographs where patients may be seen. Any tables that might add to the usefulness of the article are also welcome.

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