

# SAVE THE DATE

September 19–20, 2008

## Mark Your Calendars and Plan to Attend the Next MPS Scientific Meeting

The next Scientific Meeting of the MPS will be held at Northwestern University, Chicago.

Midwest Pain Society Update is published by the Midwest Pain Society, 4700 W. Lake Avenue, Glenview, IL 60025-1485, (847) 375-4730, fax (888) 809-6849, e-mail [mps@amctec.com](mailto:mps@amctec.com). Copyright © 2008 Midwest Pain Society. All rights reserved. Address correspondence to the editor: Karen Frizelis, MSN, NP, at [karen.frizelis@dupagemd.com](mailto:karen.frizelis@dupagemd.com)

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## Are you interested in submitting an article for the Midwest Pain Society newsletter?

Contact Karen Frizelis, MSN, NP, at [karen.frizelis@dupagemd.com](mailto:karen.frizelis@dupagemd.com)



# Midwest Pain Society UPDATE

June 2008

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## PRESIDENT'S COLUMN

### CHANGING OF THE GUARD

My term as President will end at this year's 32nd Scientific Meeting, so this is my last President's

Column. I have enjoyed serving the MPS over the past two years, and am happy to report that the society is thriving. We are financially sound, and have had the opportunity to invest some of our assets to help ensure that the organization will remain that way for years to come. Barring any unforeseen problems, we will continue to fund the Robert G. Addison, MD and E. Richard Blonsky, MD Trainee/Resident/Fellow Research Grants on yearly basis. In addition, our annual meeting continues to be highly successful. The number of attendees at our 2007 meeting increased approximately 30% compared to prior years.

Steven J. Krause, Ph.D., M.B.A., will serve as the next President of MPS. Dr. Krause is a clinical psychologist who is employed at the Cleveland Clinic, and he has made valuable contributions to the society by serving as the Scientific Program Chair or Co-Chair of the annual scientific meetings since 2004, and by serving on the Board of Directors. I wish to congratulate him on being elected as the next President of MPS, and I am certain that he will serve the society well in this role.

### 2008 ANNUAL MPS MEETING

Please plan to attend the 32nd Scientific Session of MPS on September 19–20, 2008, at Northwestern University in Chicago, Illinois. Topics to be discussed at this year's meeting include perspectives on the under-treatment of pain, updates on interventional pain management, perspectives on pain and addiction, and pediatric pain. We again have an

outstanding line-up of speakers, and we are attempting to add a few more sponsored events.

I would like to thank the members of the Scientific Program Committee for their efforts in putting together our upcoming annual meeting. Dr. Nathan Rudin and Dr. Christine Gagnon are the Co-Chairs of the committee, and other members include Dr. Steven Krause, Dr. Raymond Tait, Dr. April Vallerand, Dr. Vikram Patel and Dr. Elizabeth Huntoon.

Please remember that we will not be distributing talk outlines at this year's annual meeting. Based on your feedback, we will make the outlines available on the web (<http://ampainsoc.org/societies/mps/>) just prior to the meeting. The meeting brochure will let you know when they will be available.

### LOOKING BACK

I have been involved with MPS since 1999. In 2000, I was delighted to be invited to speak at the 25th anniversary meeting in a break-out session with Dr. Frank Keefe, Dr. Dennis Turk and Dr. Christopher Sletten. Interesting things often happen at pain meetings. I remember sitting next to Dr. Keefe and eating lunch at this meeting, when he suddenly sprang out of his seat after the waiter accidentally poured coffee on his back (luckily, he wasn't injured). A few years later, the MPS meeting moved to the Intercontinental Hotel. The meeting rooms there

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*President's Column continued*

were exquisitely decorated—I can't think of any other place where I have had the opportunity to speak right next to a full suit of armor!

Back in 2005, Dr. Steve Stanos and I made a bet on the Ohio State-Michigan Football game—the loser would wear the other team's apparel at the annual MPS meeting. I thought I would do well, except that this was soon after Ohio State fired John Cooper and hired Jim Tressel. Cooper has a dismal record against Michigan, but now Tressel is 5-1 against us, leaving me wearing scarlet and gray every meeting. Doesn't seem like a good bet now!

I have been fortunate to develop a number of professional contacts and friendships over the years with people that I have come to know through MPS. MPS has a long tradition, which Dr. Kenneth Lofland highlighted in a prior issue of the MPS newsletter. I have very much enjoyed my time serving as President of MPS, and I look forward to continuing to serve the organization.

#### CHALLENGES IN TREATING PAIN

An ongoing challenge to treating pain involves access to and payment for comprehensive pain management services, primarily for chronic pain. Interestingly, in the early 1990s, interdisciplinary pain programs were on the rise, with one publication estimating over 1,000 programs in existence in the United States. However, the number of interdisciplinary programs is now beginning to decline. To address this, interested members of the American Pain Society formed a Pain Rehabilitation Special Interest Group in 2006. This group is attempting to educate others about the need for interdisciplinary pain programs in the treatment of chronic pain, and to try and find ways to increase the number and viability of these types of programs.

I recently had the opportunity to review data on the composition of MPS, and we are a highly interdisciplinary society. We have approximately equal numbers of physicians, nurses and psychologists, and a large number of other allied health professionals. As pain practitioners, we recognize the need to provide comprehensive services to our patients in order to maximize the benefit they receive from their care. Given that we are a multidisciplinary society, I hope that MPS and

its members can join together to promote comprehensive pain care locally as well as nationally.

If you have any questions, comments or suggestions about MPS, please let me know. The easiest way to reach me is through e-mail: mgeisser@umich.edu.

## INTERVENTIONAL PAIN MEDICINE

*Vikram B. Patel, MD, FIPP  
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Earlier in our series I had written about some exciting interventional pain treatments. This column is once again based on a true story. Of course, the real name of the patient is substituted for privacy purposes.

Joe, at 46 years, was a happy worker at a very well-known company that made chocolates. He was, and is, one of the few who have the knowledge of the secret formula for a very popular brand of chocolate. Mishaps are unpredictable and this one was no different. A heavy object fell on his left foot while at work. There was some crush injury and some minor fractures involving the ankle. The subsequent surgical repair led to a series of operations to "fix" what was broken. The mechanical job was done! But the nervous system had something else in mind for Joe and it created a horribly painful syndrome for him, which we know as Complex Regional Pain Syndrome Type I (CRPS I). Severe burning pain, the hallmark of this syndrome, was also accompanied by joint dysfunction due to his inability to perform proper physical therapy and swelling of the foot. Crutches were inevitable and there was no possibility of return to work, which he so dearly loved. A series of lumbar sympathetic blocks was performed at the pain center and some medications (non-opiates) were also started. By now the injury was more than a year old. Some relief was gained in the form of reduced swelling and slightly improved function, but the foot could still not bear any weight due to burning in the plantar surface. Spinal cord stimulation (SCS) was offered (a trial followed by a permanent placement if

helpful) but the patient was very reluctant of having "something" in his spine. He wanted his "doctor" (the orthopedic surgeon) to approve it and give his opinion. As an orthopedic surgeon who had seen several patients get almost complete relief from spinal cord stimulation, he naturally advised the patient to follow the pain physician's advice. He kept thinking and finally after another year of dysfunction and pain, he agreed to a trial of SCS. After a successful trial he reported about 97% pain relief and a remarkable change in his skin color over the foot and ability to put weight on it. The ankle was still a bit "sore," but he was able to ambulate without any crutches. He was reluctant to the removal of the stimulator lead after the trial period as it was so helpful, but a permanent stimulator lead mandated the removal of the trial lead. Finally he received a permanent spinal cord stimulator with a rechargeable implantable pulse generator (IPG) which worked wonders and he was able to return to the job that he enjoyed and was much happier to be off the drugs and his crutches.

Such stories are not uncommon with patients treated with spinal cord stimulation. For decades this treatment has been utilized to treat chronic pain conditions. Most of us are aware of its use in the treatment of CRPS type I and II, post-laminectomy syndromes, chronic back pain, etc. In Europe, however, it is used more for the treatments of vascular diseases. Its use in angina and peripheral vascular diseases (PVD) is probably one of the very few indications where there is objective evidence of its efficacy. Studies have shown that in cases of non-reconstructible critical limb ischemia (NR-CLI), spinal cord stimulation actually provides better outcome than distal vascular bypass (1). The mechanism for such effect is similar to sympathetic blockade with improved micro-vascular circulation and better oxygenation of the tissue. For CRPS I and II, SCS has not only been shown to be beneficial, [CRPS type I (Level A evidence) and type II (Level D evidence)] but also cost effective (2).

The mechanism of action for spinal cord stimulation is not well-understood or agreed upon. Some strong theories do exist and have been proven in animal studies. In the treatment of several pain syndromes, the studies showed that cutaneous afferents were regularly

*continued on page 3*

*National and Regional Resources continued*

#### REGIONAL RESOURCES

##### Educational Opportunities Through Meetings and Events

Less travel and time away from practice  
Reasonably priced membership and attendance fees

##### A Sense of Community

Networking opportunities with local experts  
Professional seminars and dinner meetings  
Greater opportunities for leadership development and skill building including committees, conferences, leadership roles in local and state levels, and mentor programs  
Collaborate with local universities for education and research  
Able to rapidly organize and respond to local issues

##### Publications

Some regional sections publish journals and newsletters addressing local issues

## 32ND ANNUAL SCIENTIFIC MEETING

The 32nd Annual Scientific Meeting of the Midwest Pain Society (MPS) will be held September 19–20 at Northwestern University in Chicago. Sessions are planned on the under-treatment of pain, updates on interventional pain management, perspectives on pain and addiction, and pediatric pain. Additional activities include a poster competition and opportunities to network with colleagues. Please plan to attend this exceptional opportunity to keep up-to-date on pain research and treatment close to home. For further information, see the MPS web site at <http://www.ampainsoc.org/societies/mps/>. We look forward to seeing you in Chicago!

## CALL FOR POSTER ABSTRACTS

**32ND MIDWEST PAIN SOCIETY SCIENTIFIC MEETING  
SEPTEMBER 19–20, 2008  
NORTHWESTERN UNIVERSITY, CHICAGO, ILLINOIS**

The Midwest Pain Society (MPS) invites you to submit abstracts for posters to be presented at the annual meeting, September 19–20, 2008. Posters will be displayed Friday, September 19, and all interested parties are encouraged to submit abstracts. Authors of accepted posters will be notified in late July, and will receive further information about presentation guidelines. Posters accepted for display will also be entered in the 2008 MPS poster competition, and will be independently rated by the program committee members, including nurses, physicians and psychologists. Award winners will be announced during the breakfast presentation Saturday, September 20.

**INSTRUCTIONS:** Abstracts may be submitted electronically or via mail. Submitted abstracts must be 300 words or less and include the name, address, phone number, fax number, e-mail address and MPS membership status for each author. Also, please indicate if the corresponding author is other than the first author. At least one author must have agreed to attend the MPS meeting. MPS will not waive the registration fee for poster presenters.

**SUBMISSION DEADLINE:** July 7, 2008

**SELECTION CRITERIA:** Each poster submission will be reviewed and rated by the poster selection committee for the following elements:

- 1) Scientific quality
- 2) Broad appeal to the interests of the membership
- 3) Timeliness of the topic

#### SUBMIT ABSTRACTS TO:

Chris Gagnon, Ph.D., Co-Chair  
Rehabilitation Institute of Chicago  
cgagnon@ric.org

## MIDWEST PAIN SOCIETY MEMBERSHIP APPLICATION

Members receive the semiannual MPS newsletter and discounted conference fees at the annual MPS meeting. Please complete the information and send with a check, via U.S. Postal Service, to MPS or fax to MPS at 1-888-809-6849. We accept Visa, MasterCard and American Express.

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Discipline: \_\_\_\_\_  
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Type of Membership Desired (check one):

- Doctoral (\$50)  
 Other Health Professional (\$30)  
 Resident/Student (\$10)

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Who recruited you to join the MPS? \_\_\_\_\_

*Interventional Pain Medicine continued*

activated by SCS and antidromic activation could represent a possible antalgic mechanism of SCS in patients with peripheral neuropathic pain (3). As for its mechanism in vasodilatation, it appears that SCS-induced vasodilatation may be mediated via only the myelinated fibers at lower level of stimulation, whereas higher levels of stimulation may also involve antidromic activation of some unmyelinated C-fibers (4). This antidromic activation mediates the peripheral release of Calcitonin Gene Related Peptide (CGRP), which in turn causes the vasodilatation (5).

Studies that are randomized and controlled are not that abundant for this modality (6). Several variables are to be considered such as the psychological condition of the patient, presence of secondary gain issues and improper indications. In properly selected patients who have a good indication as well as absence of modifiers such as secondary gain issues, SCS may be the treatment of choice after lesser modalities are exhausted. Many times, a multi-modal approach is missed by the treating physician and the outcome is not that encouraging. Physical therapy is a must for any patient suffering from CRPS or post-laminectomy syndrome. Outcomes are definitely better when a multi-disciplinary approach is utilized. Current health care situation sometimes prevents such approach due to an erroneous belief on the payor's part that it would increase cost, but they fail to notice the continued expense of an ongoing chronic pain condition as well as the patient's side of the situation, which is not only physically trying, but also financially and emotionally exhausting.

In the recent past, there has been an increased interest in this very effective modality. Several newer indications have surfaced. Among them are sympathetic pain, visceral pain syndromes (such as pancreatitis, pelvic pain), low back pain, vascular phenomena with painful conditions, etc. Peripheral nerve stimulation is also one of the newer indications that is reported to be effective in occipital neuralgia causing headaches, peripheral neuropathic pain syndromes and Plexopathies. Central stimulation, a neurosurgical procedure, is also an effective treatment for various central pain syndromes.

Hopefully the future of chronic pain syndrome treatments will be based on neuro-modulation rather than pharmacological means of treatment.

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## INTERDISCIPLINARY CHRONIC SPINE PAIN PROGRAM OUTCOMES

*Long-Term Psychological and Physical Outcomes of a Two-Week Interdisciplinary Chronic Spine Pain Rehabilitation Program*  
Derek G. Turesky, M.A. & Valerie Keffala, Ph.D.  
Department of Orthopaedics and Rehabilitation,  
University of Iowa Hospitals & Clinics

Back pain is a widespread phenomenon which is estimated to affect up to 85% of the U.S. population at some point in their lives (Andersson, 1999). In particular, back pain is the most common cause for limitation of

activity among Americans less than 45 years old, the second leading reason for physician visits and the third most common reason for surgery (Andersson, 1999). From an economical perspective, back pain has led to lost wages and health costs exceeding 100 billion dollars annually (Katz, 2006). Back pain that lasts greater than three months is typically defined as chronic pain (Andersson, 1999). Chronic pain is described as a fundamentally different experience than acute pain because it is conceptualized as an interaction of cognitive, biological and behavioral components (Bank & Kerns, 1996). Traditional biomedical treatments for chronic back pain have been largely unsuccessful in bringing pain relief to patients (Lanes et al., 1995). The biomedical approach may be more appropriate for acute pain, which is usually the result of trauma or medical procedures and is typically characterized as shorter in duration and greater in intensity (Patterson, 2004). Alternatively, chronic pain is thought to be maintained in the absence of tissue damage but rather by such factors as emotional distress, focus on physical complaints, believing the only cure is physical, reward contingencies for not getting better and atrophied muscle tissue from limiting activity (Patterson, 2004).

Given the potentially unconventional etiology of chronic back pain, it is not surprising that approaches extending beyond the physical to the psychological aspects of the pain have been explored. For example, back pain has been shown to have reactivity to stress, which has emerged as a potential entry point for psychological intervention (Burte, Burte & Araoz, 1994). Given this connection, relaxation, biofeedback, cognitive restructuring and other psychological coping techniques have all been utilized to control pain (Hoffman, Papas, Chatkoff, & Kerns, 2007). In addition, interdisciplinary programs have been utilized as treatments for chronic pain and have shown promising results (Sanders, Harden, & Vicente 2005). The present study explored the long-term effectiveness of a two-week interdisciplinary rehabilitation program among 166 patients (77 men and 89 women) with chronic unremitting spine (i.e., back and/or neck) pain. For all patients, chronic spine pain lingered beyond all previous medical interventions, including any surgeries, and no

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*Chronic Spine Pain continued*

further medical treatment was indicated. The interdisciplinary program included the following components: (a) psychological interventions based on behavioral medicine models (e.g., cognitive-behavioral strategies), (b) physical interventions focusing on cardiovascular health and functional restoration, (c) vocational counseling, and (d) educational lectures by various medical professionals. Follow-up visits were conducted as part of regular treatment at six weeks, three months and six months. Patients completed scales for depression (Beck Depression Inventory-II: BDI-II) and health-related quality of life (Health Status Questionnaire-2: HSQ-2) along with physical therapy functional measures (e.g., squat lift) before the program, after the program and at each follow-up time point.

Results regarding psychological measures revealed that patients reported significant reductions in depression (total BDI-II scores) after the completion of the two-week program compared to baseline ( $p < .001$ ) and sustained these reductions at each of the subsequent follow-up points compared to baseline scores (all  $p$ 's  $< .001$ ). Patients also reported significant increases in health-related quality of life (physical component summary and mental component summary subscales of HSQ-2) from baseline compared to all follow-up time points (all  $p$ 's  $< .001$ ). Results regarding physical measures revealed that patients' functional squat lift total weight significantly improved from baseline compared to all follow-up time points (all  $p$ 's  $< .001$ ).

In summary, our results support the effectiveness of a two-week interdisciplinary program for the treatment of chronic spine pain. In particular, patients completing the program appeared to benefit not only on psychological outcomes such as depression and health-related quality of life, but also on objective physical outcomes such as total squat lift capacity. Thus, results suggest that in addition to improving one's psychological adjustment and coping to chronic pain, patients appear to be experiencing an improved functional capacity. Most notably, patients sustained the post-completion psychological and physical outcomes throughout the entire six-month follow-up

period. This may suggest that patients are learning new cognitive, behavioral and physical coping strategies that they continue to practice at least six months after the completion of the two-week rehabilitation program. This is likely to have direct impact on level of disability, return to work status and overall quality of life. Overall, these findings appear to indicate potential long-term psychological and physical benefits of an interdisciplinary chronic spine pain rehabilitation programs and provide a basis for further exploration of the long-term psychological and physical outcomes.

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## NATIONAL AND REGIONAL RESOURCES

**American Pain Society**

RESEARCH  
EDUCATION  
TREATMENT  
ADVOCACY

Six regional sections flourish under the umbrella of the national society, each serving the special needs of its local constituency. The American Pain Society has a mutually beneficial relationship with these six regional sections. They offer an opportunity for professionals to network within their regions.

#### APS RESOURCES

##### Annual Scientific Meeting

Discounted registration fee for members  
Submit proposals for symposia and abstracts for poster presentations

##### The Journal of Pain

Published monthly  
Members have access to online archive of articles

##### Complimentary Publications

Evidence-based guidelines  
*Principles of Analgesic Use in the Treatment of Acute Pain and Cancer Pain*  
*APS Bulletin*  
*APS E-News*

##### Comprehensive Web Site

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##### Professional Excellence

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##### Networking Opportunities

Special interest groups  
Facilities for Regional meetings at the Annual Scientific Meeting

##### Advocacy & Outreach

Pain Care Coalition  
Collaboration on common objectives for pain research and care

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