



The Anatomy, Diagnosis, and  
Treatment of Chronic Myofascial Pain with

# Prolotherapy

OCTOBER 18-20, 2012

Research Symposium

OCTOBER 17, 2012

The Lowell Inn and  
Conference Center  
Madison, Wisconsin

Jointly Sponsored by

University of Wisconsin  
School of Medicine and Public Health

Department of Family Medicine

Office of Continuing  
Professional Development  
in Medicine and Public Health

and

The Hackett Hemwall  
Foundation



## Statement of Need

The treatment of chronic pain is a complex, multifaceted problem. The faculty of this activity offer participants detailed instruction in the use of prolotherapy, with basic and advanced techniques, to treat laxity of ligaments that often cause chronic myofascial pain. Due to more active lifestyles, an aging patient population, and patient desire for relief of chronic pain, prolotherapy is an elegant, effective and safe treatment.

## Target Audience and Scope of Practice

This educational activity has been designed to meet the needs of physicians, (MDs, DOs, NDs and Podiatrists) who manage patients through the diagnosis and treatment of chronic pain due to ligament instability.

## Elements of Competence

This CME activity has been designed to change learner competence and focuses on the American Board of Medical Specialties areas of patient care and procedural skills, medical knowledge, and practice-based learning and improvement.

## Activity Overview

The needs will be addressed by the use of lectures, extensive anatomy review, discussion, demonstrations and practice injections on cadavers with C-arm guidance, and viewing of injection videos with a faculty member and model. The hands-on workshops will enable the conferee to have practical training in palpation and marking for prolotherapy. Discussions of prolotherapy indications and complications along with a panel discussion of complicated cases will enhance the participant's learning.

## Learning Objectives

At the conclusion of this activity, participants will

- Recognize new clinical science research in injection therapy for musculoskeletal conditions including knee osteoarthritis, low back pain and tendinopathies
- Review new clinical science research in injection therapy for musculoskeletal conditions
- Recognize research being conducted in prolotherapy with suggestions for collaborating in research projects
- Gain a thorough acquaintance with the anatomy of ligaments
- Participate in C-arm guided cadaver injections
- Illustrate complications, and ways to avoid complications, when treating patients with prolotherapy
- Observe video of injections with faculty moderating with a model
- Obtain insight into the neurophysiology of pain
- Recall new advances in the use of, PRP and stem cells for musculoskeletal diagnosis and treatment
- Gain knowledge of neural therapy for the treatment of chronic pain
- Identify ways to promote a prolotherapy practice

## Conference Highlights

- Most comprehensive prolotherapy conference teaching of the whole body
- Nationally and internationally recognized faculty of 29 experts
- 18 didactic lectures on prolotherapy
- 6.75 hours of hands-on workshops taught by prolotherapists
- Cadaver lab where participants will do multiple injections
- 22 AMA PRA Category 1 Credits™

## Research Symposium Pre-Conference Highlights

- Will bring active clinicians and researchers together to present completed & ongoing research in prolotherapy and related injection therapies for soft tissue pathology
- In-depth discussions of new clinical science research in injection therapies
- Review ongoing clinical research on the use of radiologic guidance and assessment in the context of injection therapy
- 8 AMA PRA Category 1 Credits™

## Madison At A Glance

A progressive and cosmopolitan city of 250,000, Madison is home to the world-class University of Wisconsin, the seat of state government, and an eclectic, electric atmosphere that energizes any visitor's stay. Built on a narrow isthmus between Lakes Monona and Mendota, Madison is one of the nation's most scenic cities. Five area lakes and more than 200 parks provide countless recreational activities, from swimming, sailing and fishing to biking, hiking, inline skating and more. Madison offers both small town charm and a range of cultural and recreational opportunities usually found in much larger cities. New to Madison in 2011 are 34 bike rental "stations" with 350 bikes that can be rented by the half hour or longer. This is a great way to explore Madison with its 275 miles of bike paths and lanes! (bring your own helmet)

## Conference Venue

The Lowell Inn and Conference Center is a University of Wisconsin facility, located in the heart of the UW campus at 610 Langdon Street. The center has conference rooms, dining facilities, lounges and a swimming pool with sauna. On-site parking for guests is \$8 per day; complimentary parking is available nearby. Lowell Inn has 137 guest rooms which have recently been remodeled and upgraded. Also, there is now a convenient drive up lane on Frances Street, to facilitate easy accessible access to the center. One of Lowell's greatest assets is their helpful, friendly staff.

## Conference Attire

On Friday, for our hands on workshops, comfortable casual clothing is suggested. Since meeting room temperatures and personal comfort levels vary, it is recommended that you bring a sweater or jacket for the lecture days. Casual clothing is appropriate for the entire conference.

# General Information

## Dates

**RESEARCH SYMPOSIUM PRE-CONFERENCE SESSION**  
OCTOBER 17, 2012 7:45 AM - 5:15 PM

**CONFERENCE**  
OCTOBER 18 - 20, 2012 (THURSDAY - SATURDAY)

## Fees

\$1,200 Conference registration  
\$ 250 Research Symposium

The fees include the cost of tuition, course materials; breakfasts; lunches Wednesday, Thursday and Friday; breaks all days, and dinner on Thursday evening. Meals and breaks are for registered attendees. Guests may join you for meals - see pricing in registration area of brochure.

## Conference Location and Accommodations

Lowell Inn and Conference Center  
610 Langdon Street  
Madison, WI 53703

To make hotel room reservations at Lowell, please call: 608-256-2621 or 866-301-1753. Email: Lowell@ecc.uwex.edu A block of rooms has been reserved. These rooms will be held for our conference until September 17, 2012. The room rate is from \$89 to \$117 per night.

An additional block of hotel rooms is available at The Inn on the Park. This hotel is a pleasant 10 minute walk from the conference center. Rooms will be held there until September 16, 2012. For reservations call: 608-285-8000. The block of rooms is listed under: **Prolotherapy**

## On-site Check-In

(New registrations will not be accepted on day of conference)  
October 17, 2012: 7:00 - 7:45 AM and 4:30 - 7:00 PM  
October 18, 2012: Starting at 7:00 AM

## Program Changes

Emergency situations occasionally occur and may necessitate topic or speaker change. The University of Wisconsin School of Medicine and Public Health reserves the right to alter or substitute a topic or speaker without prior notification.

## Course Materials

All registered participants will receive an electronic copy (USB drive) of the syllabus at conference Check-in. Please bring your laptop computer to view the presentations. If there are any concerns regarding the electronic syllabus, please contact Mary Doherty prior to the conference.

## Cancellations/Refund Policy

All cancellations must be received by October 11, 2012. This will allow wait-listed people to take the place of a cancellation, if one occurs. Cancellations received by October 11, 2012 will receive a refund; cancellations after that time will not receive a refund. **All cancellations will be charged a processing fee of \$50.**

## Credit

### Accreditation Statement

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of Wisconsin School of Medicine and Public Health and The Hackett-Hemwall Foundation. The University of Wisconsin School of Medicine and Public Health is accredited by the ACCME to provide continuing medical education for physicians.

### Credit Designation Statement

The University of Wisconsin school of Medicine and Public Health designates this live activity for a maximum of 30 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Research Symposium = 8 *AMA PRA Category 1 Credits™*  
Conference = 22 *AMA PRA Category 1 Credits™*

### Continuing Education Units

The University of Wisconsin-Madison, as a member of the University Continuing Education Association (UCEA) authorizes this program for 3.0 continuing education units (CEUs) or 30 hours.

## Policy On Disclosure

It is the policy of the University of Wisconsin School of Medicine and Public Health that the faculty, authors, planners, and other persons who may influence content of this CME activity disclose all relevant financial relationships with commercial interests in order to allow CME staff to identify and resolve any potential conflicts of interest. Faculty must also disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation(s). Detailed disclosures will be made in the activity materials.

## Special Dietary Needs

Vegetarian selections will be available at all provided meals. If you require additional assistance, contact Mary Doherty at least 1 week before the conference at: mdoherty@wisc.edu

## For Further Information

Mary P. Doherty  
608-712-5518  
mdoherty@wisc.edu



## RESEARCH SYMPOSIUM

This annual meeting is designed to bring together clinicians, clinical researchers and basic scientists interested in research of prolotherapy and related injection therapies for soft tissue pathology. Each speaker is an active clinician and/or researcher who will present completed or ongoing findings. The overall tone of the conference is participatory. Our primary goal is to facilitate a high level of understanding of current research and to stimulate further work among researchers and interested clinicians.

WEDNESDAY, OCTOBER 17, 2012		
AM		
7:45	Growth in Research	Jeffrey Patterson, DO David Rabago, MD
8:00	<b>MORNING SESSIONS -</b> Dextrose-Morrhuate (prolotherapy) injections for knee OA: Results of a modified cross-over study  Prolotherapy for osteoarthritic knee pain: Magnetic resonance imaging outcomes  Arthroscopically monitored effects of prolotherapy in knee osteoarthritis: Update on the Rosario Argentina knee OA study  Same day bone marrow isolate vs. cultured mesenchymal stem cells for knee arthritis: Clinical outcome comparison and platelet MSC response	Luke Fortney, MD  David Rabago, MD  Dean Reeves, MD  Christopher Centeno, MD
10:00	Refreshment Break	
10:15	<b>MORNING SESSIONS (cont.) -</b> Prolotherapy and PRP for refractory knee osteochondral defect in an elite athlete: A case report  Biomarkers for assessment of knee OA: Implications for injection therapy research  Prolotherapy for tennis elbow: Results of an RCT and introduction to future clinical trials  Acousto-elastography as a biomarker for tendinopathy: Results from recent clinical trials	Brian Shiple, DO  Jason Tucker, MD  David Rabago, MD  Ken Lee, MD
PM		
12:30	Lunch	
1:30	<b>AFTERNOON SESSIONS -</b> Update on Prolotherapy in the treatment of rotatorcuff tendinopathy: A randomized controlled trial  Incidence of scapula-thoracic enthesopathies in patients with symptomatic rotator cuff impingement: Response to prolotherapy  Treatment of Temporomandibular Dysfunction with Hypertonic Dextrose Injection: A randomized clinical efficacy trial	Helene Bertrand, MD  Brad Fullerton, MD  Stanley Lam, MD
3:00	Refreshment Break	
3:15	<b>AFTERNOON SESSIONS (cont) -</b> Dextrose caudal epidural injection for low back and associated buttock or leg pain  Mining the database: Case report from clinical practice  Final comments: Expanding the injection therapy research base	Liza Maniquis-Smigel, MD  Young Uck Kim, MD  David Rabago, MD & Jeffrey Patterson, DO
5:15- 6:30	Reception	Upper Lounge
7:00	Dinner at Chautara Restaurant (optional)	



## CONFERENCE

# Schedule

### THURSDAY, OCTOBER 18, 2012

AM		
6:45	Breakfast	Dining Room - Lower Level
7:45	Welcome	Jeffrey J. Patterson, DO
8:00	Prolotherapy - Safe, Simple, Effective & Elegant Therapy	Jeffrey J. Patterson, DO
8:45	Anatomy & Injection Techniques: Shoulder	Jeff Ericksen, MD
9:30	Anatomy & Injection Techniques: Knee	Annette Zaharoff, MD
10:15	Refreshment Break	
10:30	Anatomy & Injection Techniques: Low Back	Joel Baumgartner, MD
11:15	Anatomy & Injection Techniques: Hip & Pelvis	David Wang, DO
12:00	Anatomy & Injection Techniques: T-Spine & Ribs	Jeffrey J. Patterson, DO
PM		
12:45	Lunch	Dining Room - Lower Level
1:45	Anatomy & Injection Techniques: Foot & Ankle	Lenny Horwitz, DPM
2:30	Anatomy & Injection Techniques: Elbow & Wrist	Brian Shiple, DO
3:15	Anatomy & Injection Techniques: C-Spine & TMJ	Carl Osborn, DO
4:00	Refreshment Break	
4:15	Pain: The Destructive Spiral	Michael M. Patterson, PhD
5:00	Clinical Bio-Tensegrity	Gary Clark, MD
5:30	Adjourn	
7:00	University of Wisconsin & Hackett Hemwall Foundation International Treating and Training Trips - Honduras and Mexico	Dinner Presentation Dining Room - Lower Level

### THURSDAY ADVANCED SESSIONS

For expert injectors that have previously attended the HHF conference

Lower Lounge

10:30 - 12:00	Advanced Cervical & Thoracic Spine Injection Topics	Peter Fields, MD, DC & Annette Zaharoff, MD
2:30 - 4:00	Advanced Low Back & Hip Injection Topics	Joel Baumgartner, MD & Jeff Ericksen, MD

### FRIDAY, OCTOBER 19, 2012

AM		
6:45	Breakfast	Dining Room - Lower Level
7:45	Workshop Orientation	Jeffrey J. Patterson, DO
8:00	Workshop Session 1	
10:15	Refreshment Break	
10:45	Workshop Session 2	
PM		
1:00	Lunch	Dining Room - Lower Level
2:00	Workshop Session 3	
4:15	Refreshment Break	
4:45	Observe Faculty Injections	
5:45	Adjourn	
6:00 - 7:30	Reception	Upper Lounge



## CONFERENCE (cont)

### FRIDAY, OCTOBER 19, 2012

**FRIDAY WORKSHOP SESSIONS** - You will rotate through all 3  
 Anatomy Palpation, Examination and Marking Skills  
 Injection Demonstration of Cadavers, Participant practice lab  
 Injection Demonstrations Utilizing Models & Video

**Workshop Directors**  
 Joel Baumgartner, MD  
 James Nosal, MD &  
 David Wang, DO  
 Jeffrey J. Patterson, DO &  
 Adrian Gretton, MD

### SATURDAY, OCTOBER 20, 2012

#### AM

6:45	Breakfast	Dining Room - Lower Level
7:30	Prolotherapy Pearls: Possible Complications & How to Avoid Them	Jeffrey J. Patterson, DO
8:00	Recent Advances in Prolotherapy Research	David Rabago, MD
8:30	Prolotherapy Case Studies	Young Uck Kim, MD
9:15	Refreshment Break	
9:45	Prolotherapy Billing Guidelines	John Finkenstadt, MD
10:15	Building a Prolotherapy Practice	Peter Fields, MD, DC
10:45	Introduction to Neural Therapy	Liza Maniquis-Smigel, MD
11:15	Prolotherapy Injection Solutions & PRP	Jeffrey J. Patterson, DO
12:15	Panel Discussion: Unique Prolo Cases	Jeffrey J. Patterson, DO, Brian Shiple, DO, Andrew Kochan, MD Joel Baumgartner, MD
1:00	Adjourn	

## The Anatomy, Diagnosis, and Treatment of Chronic Myofascial Pain with Prolotherapy Research Symposium - Pre-Conference Session October 17-20, 2012

### Two Easy Ways To Register

**On Line:** [www.ocpd.wisc.edu/course\\_catalog](http://www.ocpd.wisc.edu/course_catalog)  
**By Phone:** 608-262-1397. Please call and give your credit card information (MasterCard, VISA) Please specify course number: 4017; ame-prol

**Please Note:** (Your registration will not be confirmed until payment is made in full and you have submitted your MD, DO, ND or Podiatry License number and the state/province that issued the license. Please direct questions to: Mary Doherty ([mdoherty@wisc.edu](mailto:mdoherty@wisc.edu))

Please register early. Enrollment will be limited. We anticipate that the conference will be filled to capacity. All registrations will be confirmed in writing or email. Please specify the address that you would like us to use. If you do not receive a confirmation, please call 608-262-1397).

### Registration Fees

\$1,200 Conference (October 18-20, 2012)  
 \$ 250 Research Symposium (October 17, 2012)

**Please Note:** Refreshment Breaks, Lunches, Thursday evening Dinner and Receptions are included for Registered attendees only. If you would like your guest join the group for any of these events, please pay the fee listed below.

Fee for accompanying guest meals/receptions:

\$ 40 Research Symposium - Lunch & Reception  
 \$ 95 Conference - 2 lunches, Thursday dinner, Friday reception  
 \$ 60 Dinner Thursday evening & Friday reception

*The University of Wisconsin provides equal opportunities in employment and programming, including Title IX requirement. The University of Wisconsin School of Medicine and Public Health fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity is in need of accommodations, please notify Mary Doherty in order to receive service. Please call 608-712-5518.*

## Planning Committee

**Jeffrey J. Patterson, DO**, Activity Director, Professor Emeritus, Department of Family Medicine, University of Wisconsin School of Medicine and Public Health, Director, Hackett Hemwall Foundation

**Mary P. Doherty**, Activity Coordinator, Executive Director, Hackett Hemwall Foundation

**David Rabago, MD**, Research Symposium Day Director, Assistant Professor, Department of Family Medicine, University of Wisconsin School of Medicine and Public Health

## Faculty

⌘ = Research Symposium faculty

⚡ = Conference faculty

### Jeffrey J. Patterson, DO<sup>⌘⚡</sup>

Dr. Patterson has spent his professional career as Professor in the University of Wisconsin School of Medicine and Public Health, Department of Family Medicine. His practice includes family medicine, specializing in the treatment of chronic pain, focusing on prolotherapy and osteopathic manipulation. As the medical director of the Hackett Hemwall Foundation, he guides the foundation in the work of providing care to patients in underdeveloped countries, training physicians and doing research in prolotherapy. Dr. Patterson also has a passionate interest in abolishing the world of nuclear weapons, and in medical effects of climate change. Currently he is the president elect of Physicians for Social Responsibility, a US organization of 30,000 physicians that share his goals.

### Joel Baumgartner, MD<sup>⚡</sup>

Dr. Baumgartner specializes in non surgical orthopedics, sports and regenerative medicine. He is founder of Rejuv Medical where they focus on reversing the process of degeneration and injury using injection procedures, endocrine disorder balancing and medically supervised weight loss. He enjoys fitness and sports performance in tennis, volleyball and skiing.

### Helene Bertrand, MD<sup>⌘</sup>

Dr. Bertrand had a busy family medicine practice in British Columbia, Canada up until 2010 when she became frustrated trying to help patients with chronic MSK pain. At this point, she decided to dedicate her professional life to prolotherapy - a treatment that helps patients with chronic pain, and research. She currently is doing research in chronic pain of the shoulder while continuing to treat patients with prolotherapy and neural prolotherapy. Dr. Bertrand is a clinic instructor at the University of British Columbia.

### Ben Bullington, MD<sup>⚡</sup>

Dr. Bullington is in practice at Pioneer Medical Center in Big Timber, MT. His practice is family medicine with a large component being chronic pain and prolotherapy. He has filled many roles in the Hackett Hemwall Foundation - as faculty at our annual Madison conference and for multiple years as clinic director in one of our Honduras clinics.

### Christopher Centeno, MD<sup>⌘</sup>

Dr. Centeno is an international expert and specialist in regenerative medicine and the clinical use of mesenchymal stem cells in orthopedics. He is board certified in PM&R and Pain Management. He maintains a busy research based practice in addition to his clinical practice in Broomfield, CO.

### Gary Clark, MD<sup>⚡</sup>

Dr. Clark has vast experience, education and knowledge in a number of areas of the medical profession including board certification in Anatomic & Clinical Pathology and Neuropathology. Early in his career, he was an Army Special Forces Med. Corps officer in Viet Nam and went on to be a professor at Bethesda and George Washington University. Since retiring from the US Army, Dr. Clark has continued his clinical training in general medicine and orthopedic medicine. Currently, he is in practice at Boulder Prolotherapy in Boulder, CO and is on the editorial board of *The Journal of Prolotherapy*.

### David De La Mora Lara, MD<sup>⚡</sup>

Dr. De La Mora is the Director of the HHF Guadalajara Chapter and organizes the annual HHF Prolotherapy and Vein Medical Brigade trip to Mexico. He has attended the Madison conference for 9 years, both as a participant and faculty member and also serves as a clinic director on the HHF Honduras trips. Dr. De La Mora has a full time prolotherapy practice in Guadalajara, Mexico.

### Jeff Ericksen, MD<sup>⚡</sup>

Dr. Ericksen is board certified in PM&R and is a staff physician at Hunter Holmes McGuire VA Medical Center, department of PM&R. He is also an Associate Professor at Virginia Commonwealth University Department of PM&R and is the director of the Regenerative Medicine component of the Interventional Pain Fellowship there. Dr. Ericksen's professional interests include: regenerative injections for MSK pain and treatment of ulcers and wounds.

### Peter Fields, MD, DC<sup>⚡</sup>

Dr. Fields is board certified in Family Medicine and is a diplomat of the American Board of Chiropractic Examiners. He is the director of Pacific Prolotherapy and Medical Wellness Center in Santa Monica, CA, where 80% of his practice is prolotherapy. In addition to prolotherapy, Dr. Fields uses PRP, stem cells and laser therapy. In his spare time, Dr. Fields has completed over 60 Triathlons, including Iron Man!

### John Finkstadt, MD<sup>⚡</sup>

Dr. Finkstadt is a physician in Syracuse, New York. He is board certified in Family Medicine and Sports Medicine. Dr. Finkstadt's practice consists mainly of MSK patients with chronic pain. An area of special interest of his is the sacral-iliac joint. He has done research in the treatment of low back pain.

### Wajid Burad Fonz, MD<sup>⚡</sup>

Dr. Burad Fonz is in practice at Olympia Sports Medicine in Cancun, Mexico where he treats patients with therapies including prolotherapy. He is board certified in PM&R, Sports Medicine and has completed training in Anti-Aging and Longevity, and MSK Ultrasound. Dr. Burad Fonz has been a valued member of the HHF medical trips to both Guadalajara, Mexico and Honduras.

### Luke Fortney, MD<sup>⌘</sup>

Dr. Fortney has spent his academic career at the University of Wisconsin-Madison. While in medical school and Family Medicine residency, he was involved in research at different levels and in different areas. Currently, he is in a family medicine group, McKee Clinic of the Meriter Medical Group in Madison, WI where he cares for family medicine patients along with chronic pain patients. His research is in knee OA.

### Brad Fullerton, MD<sup>⌘</sup>

Dr. Fullerton is board certified in Physical Medicine and Rehabilitation and is in practice in Austin, Texas. His practice focuses on treatment of injuries and arthritis. Dr. Fullerton has specialized training in ultrasound for MKS injuries and uses this imaging modality to treat patients with prolotherapy. He is currently doing research on shoulder injuries treated with prolotherapy.

### Martin Gallagher, MD, DC<sup>⚡</sup>

Dr. Gallagher is the director of Medical Wellness Associates in Jeannette, PA. He is board certified in Family Medicine and is also a chiropractor. His current practice specializes in an Integrative Medicine approach to wellness and the treatment of chronic pain, with prolotherapy and other treatments. Dr. Gallagher donates his time and medical skills to a homeless shelter in Morgantown, PA and to the HHF in Honduras.

### Adrian Gretton, MD<sup>⚡</sup>

Dr. Gretton is a family physician in Community Practice in Calgary, Canada. He is a consultant to the Chronic Pain Center and the Advanced Spinal Care Center, also in Calgary. Dr. Gretton has joined the HHF in multiple prolotherapy treating and training medical trips to Mexico and Honduras.

### Jay Harms, MD<sup>⚡</sup>

Dr. Harms is in practice in Peoria, IL and is board certified in Family Medicine. In his medical practice he cares for the entire range of family medicine patients, including chronic pain patients. Dr. Harms has been an active member of the HHF since 2003, serving in the capacity of volunteer and faculty in Honduras and at the Madison conference.

### Lenny Horwitz, DPM<sup>⚡</sup>

Dr. Horwitz practices podiatry at his clinic, The Foot Pain Center, in Bluefield, VA. He has lectured and taught extensively both nationally and internationally. Dr. Horwitz also has many published articles and several books on podiatry, ligamentous injury and treatment with prolotherapy. He is on the BOD of Soles 4 Souls, a charity that has distributed 5.5 million pairs of shoes to areas hit by disasters.

# Faculty

## **Merle Janes, MD\***

Dr. Janes is board certified in Physical Medicine and Rehabilitation and is in practice in Spokane, WA. He has traveled with the HHF to both Honduras and Mexico where his prolotherapy skills and knowledge have been utilized in not only treating hundreds of patients but also in teaching local doctors prolotherapy.

## **Paul W. Johnson, DO\***

Dr. Johnson is in practice at Pursuit Sports Medicine in Portland, OR. He is board certified in Internal Medicine and Sports Medicine. He has gone with the HHF to Honduras multiple times, the first time as a college volunteer, by bus, from Oregon! Dr. Johnson obtained his MPH and then DO degrees and now teaches prolotherapy for the HHF internationally and at the Madison conference.

## **Young Uck Kim, MD\*\***

Dr. Kim is an orthopedic surgeon in Seoul, South Korea. His clinic, Rapha Medience Orthopaedic Clinic, is a busy orthopedic surgery and prolotherapy practice. Over the past 13 years, since he learned prolotherapy at our HHF conference, he has observed the benefits of prolotherapy for his patients and his practice has changed to performing more non-surgical procedures (prolotherapy, some with PRP) than orthopedic surgery. Dr. Kim does utilize ultrasound but mainly for academic purposes and research.

## **Andrew Kochan, MD\***

Dr. Kochan is the director of Institute for Healing Arts Research and is in private practice in Santa Barbara, CA. He is board certified in Physical Medicine and Rehabilitation and is an international authority in apitherapy, particularly bee venom. Dr. Kochan has been treating patients with prolotherapy for over 20 years. He annually travels with the HHF to Honduras, where he is clinic director.

## **Stanley K. H. Lam, MBBS, MScM&HS\*\***

Dr. Lam is from Hong Kong where he has an active practice at Musculoskeletal Pain Management and Sports Injury Center. He is known internationally for his teaching in prolotherapy, neural therapy, manual medicine and other injection techniques. Dr. Lam has authored many articles on prolotherapy research, for both US and Hong Kong publications.

## **Ken Lee, MD\*\***

Dr. Lee is the Director of Musculoskeletal Ultrasound at the University of Wisconsin-Madison Department of Radiology. He has collaborated with the UW Sports Medicine Department to do PRP injections on patients with sports related injuries. Dr. Lee has presented his research on "tennis elbow", treated with ultrasound guided prolotherapy and sodium morrhuate both nationally and internationally.

## **Nina S. Maniquis, MD\***

Dr. Maniquis is in practice in Libertyville, IL at The MedAddress, A Medical Wellness Center. She has been treating patients with prolotherapy for 8 years. Dr. Maniquis organized the HHF Philippines trips and has participated in multiple HHF Honduras trips, volunteering both her prolotherapy and phlebology skills.

## **Liza Maniquis-Smigel, MD\*\***

Dr. Maniquis-Smigel is a board certified physiatrist and has also completed a fellowship in Musculoskeletal and Sports Arts Medicine. She is an electrodiagnostician and a pain interventionist. Dr. Maniquis-Smigel has been using prolotherapy in her practice in Hilo, HI for 10 years and Neural Therapy for 4 years. She teaches Neural Therapy with Dr. John Lyftogt.

## **James Nosal, MD\***

Dr. Nosal is board certified in Family Medicine. He is in practice at the Sun Prairie, WI Dean Clinic. Dr. Nosal's practice includes the entire array of family practice patients including those with chronic pain. He has taught prolotherapy at the HHF conferences and internationally.

## **Carl Osborn, DO\***

Dr. Osborn is board certified in Family Medicine and is in practice at Ventana Wellness clinic in Medford, OR. He specializes in treating chronic pain patients with prolotherapy and also has a passionate interest in helping men to naturally balance their hormones. Dr. Osborn has taught prolotherapy to physicians both nationally and internationally.

## **Richard Owens, MD\***

Dr. Owens is in practice in Madison, WI where he is the medical director of Minor Procedures, SC. He does a wide variety of office surgical procedures including therapies for varicose veins. Dr. Owens also has many chronic pain and injury patients that he successfully treats with prolotherapy. He is the director of the HHF Vein Treatment team, treating patients in Honduras and Mexico.

## **Michael Patterson, PhD\***

Dr. Patterson spent his professional life as Professor of Osteopathic Medicine, most recently retired from Nova Southeastern University COM in Florida. He taught and did research in the Osteopathic Profession for 37 years. Currently he serves as a reviewer of several journals and is Associate Editor of the JAOA. Dr. Patterson also is a science Advisor and Editor for the David Kopf Instrument Company. Dr. Patterson lectures nationally and internationally on the neurophysiology of pain and osteopathic medicine.

## **David Rabago, MD\*\***

Dr. Rabago MD is a board certified Family Medicine physician and clinical researcher at the UW School of Medicine and Public Health. He has a continuity practice in Madison, WI; his research endeavors include several prolotherapy research projects and subsequent publications. In addition, Dr. Rabago has helped others design, conduct and publish the results of their prolotherapy research projects. He lectures nationally and internationally about injection therapy research.

## **Dean Reeves, MD\*\***

Dr. Reeves is an internationally recognized researcher on prolotherapy. He is board certified in Physical Medicine and Rehabilitation and Pain Management. He has a busy PM&R / Prolotherapy practice in Shawnee Mission, Kansas.

## **Ali Safayan, MD\***

Dr. Safayan has been in practice at Restorative Health Center for Integrative Medicine in Washington DC since 1990. He is board certified in Internal Medicine. Dr. Safayan is also the preceptor in charge of the HMI/UCLA Medical Acupuncture Course for Physicians. In his practice he utilizes conventional and complementary therapies including prolotherapy.

## **Brian Shiple, DO\*\***

Dr. Shiple is the director of The Center for Sports Medicine in Springfield, PA. He is board certified in Family Medicine and Sports Medicine. Dr. Shiple is an Assistant Clinical Professor at Temple University. Prolotherapy, ultrasound, PRP, stem cells are some of his many skills/treatments used in treating patients with MSK injuries. Dr. Shiple has authored multiple articles and research projects in prolotherapy.

## **Jason Tucker, MD\*\***

Dr. Tucker is a 3rd year resident in PM&R at MCV/VCU Medical Center in Richmond, VA. His current research is looking at Biomarker synovial fluid response to injectate therapy, including PRP, and corticosteroids. Dr. Tucker's future plans include completing a Sports Medicine fellowship and starting a Sports Medicine & Regenerative Injection Medicine practice.

## **David Wang, DO\***

Dr. Wang is board certified in Physical Medicine and Rehabilitation. He currently is practicing in McLean, VA at the Kaplan Center for Integrative Medicine. Previously, he practiced at affiliate clinics of Harvard Medical School where he practiced MKS, sports and rehabilitative medicine including prolotherapy and PRP injections. Additionally, Dr. Wang uses Osteopathic Manual Medicine and Medical Acupuncture to treat his patients. Outside of his medical practice, his interests include martial arts in which he holds multiple Black Belts.

## **David Watson, MD\***

Dr. Watson's specialty is Physical Medicine and Rehabilitation. He has a broad interest in orthopedic medicine and is in solo practice in Burnaby, BC, Canada. He has traveled to Honduras with the HHF 8 times and has been treating patients with prolotherapy for 10 years. He has a published paper on prolotherapy of the low back.

## **Annette Zaharoff, MD\***

Dr. Zaharoff is a sports medicine physician in private practice in San Antonio, TX. She is board certified in PM&R and Sports Medicine and is a certified medical acupuncturist. Dr. Zaharoff does prolotherapy in her practice along with PRP injections in which she often utilizes ultrasound for safety and effectiveness. In addition to her clinical practice, she is actively involved in tennis - both as a player and a physician. Dr. Zaharoff has worked as a Sport Medicine physician for professional tournaments including the US Open. She also has been active in the HHF as a participant and instructor in our Honduras prolotherapy trip.