

Spring  
2013

# HAND SURGERY

Q U A R T E R L Y

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## MESSAGE FROM THE PRESIDENT

### AAHS puts on a Great Pre-course in Brazil

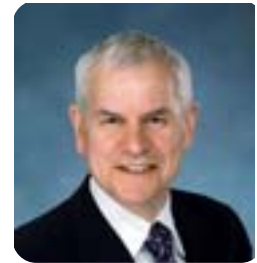
AAHS presenters were greatly appreciated in Rio de Janeiro on April 24, 2013. The AAHS provided a pre-course in conjunction with the Brazilian Society for Surgery of the Hand and the Federacion Sudamericana de Cirugia de la Mano meetings in Rio. Two hundred and sixty (260) hand surgeons attended the pre congress AAHS course and greatly appreciated the lectures provided by our members.

I would like to warmly thank Julie Adams and Randy Bindra for organizing the course. They did a great job, as did our cast of

outstanding additional volunteer lecturer members: Thomas Hughes, David Botzenka, Jeffrey Greenberg, Cherrie Heinrich, Scott F. Duncan, Mark Baratz, Brian Carlsen, Mark Rekant, Michael Bednar, Marco Rizzo, Hilton Gottshalk, William Geissler, William Lanzinger, Alejandro Badia, and Peter Murray. All had a very good time, in addition to providing outstanding education.

We may put on other pre-courses in the future. If you are interested in presenting, just let me know.

On a personal note, a lot has changed in the last year in Brazilian hand surgery. I



Donald H. Lalonde, MD

was invited by the BSSH as the guest speaker in São Paulo last year. One year later, many Brazilian hand surgeons are doing wide awake hand surgery. Those who have done wide awake flexor tendon repairs have been very gratified by the improved results and far prefer it to traditional no

*(continued on page 9)*



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**Abstract Submission Deadline:  
Sunday, June 30<sup>th</sup>, 2013**

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AMERICAN ASSOCIATION  
for HAND SURGERY  
January 8-11, 2014

AMERICAN SOCIETY  
for PERIPHERAL NERVE  
January 10-12, 2014

AMERICAN SOCIETY  
for RECONSTRUCTIVE  
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## FROM THE EDITOR'S DESK



Thomas Hughes, MD

The 2013 Annual Meeting is behind us now, and it was a great success. Jesse Jupiter and David Ring put together a tremendous program that was interactive, innovative, and full of great new material. In addition to hand surgery, many athletic social events helped to bring members of the association together in the warm weather of Florida (Finally, we had warm weather!). This included a tennis tournament, 5k run, golf tournament, and even beach volleyball.

The hotel and location were tremendous and much learning and camaraderie we experienced by all who were fortunate enough to attend. It was also a very successful meeting, with significant attendance by both our own members, as well as international guests, including our guest nation of Argentina. The Argentinians contributed to our program as speakers and panelists and added to the depth of the discussions. We were glad to have their participation and appreciate them making the significant trip to Florida to attend.

If you were one of the lucky ones to attend, you hopefully found that the program, both academic and social, reinvigorated you through the rest of the long winter. If you could not attend, you likely found your winter drag on and on

for months. So plan on getting an increased dose of Vitamin D at next year's meeting in Hawaii. Avoid the seasonal affective disorder that plagues a better part of the country from January to April. Gather with your colleagues at the beautiful Grand Hyatt Kauai Resort and Spa from January 8-11, 2014. Look at Don Lalonde's presidential column to get more of the details. We will all be there waiting for your input and experiences to help round out the meeting!

...you hopefully found that the program, both academic and social, reinvigorated you through the rest of the long winter.

## Calendar of Events

### 2013

**May 30 - June 1, 2013**

XVIII FESSH Congress  
Antalya, Turkey

**June 6-9, 2013**

11<sup>th</sup> International Meeting  
on the Surgical Rehabilitation  
of Tetraplegic Upper  
Limb cum 26<sup>th</sup> HKSSH  
Annual Congress and  
6<sup>th</sup> Annual Therapist  
Symposium of the Hong  
Kong Society for Hand  
Therapy  
Hong Kong

### 2014

**January 8-11, 2014**

AAHS 44<sup>th</sup> Annual Meeting  
Grand Hyatt Kauai  
Resort & Spa, Kauai, Hawaii

**May 18-21, 2014**

XIX FESSH Congress  
Paris, France

### 2015

**January 21-24, 2015**

AAHS 45<sup>th</sup> Annual Meeting  
Atlantis Resort  
Paradise Island, Bahamas

## HAND SURGERY Quarterly

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*Hand Surgery Quarterly* is a publication of the American Association for Hand Surgery and is published strictly for the members of AAHS. This publication is designed as a forum for open discussion and debate among the AAHS membership. Opinions discussed are those of the authors or speakers and are not necessarily the position, posture or stance of the Association.

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Hand  
Surgery  
Quarterly  
Spring  
2013

# HAND THERAPISTS CORNER: 2013 AAHS Meeting in Review

Every year the first day of the AAHS annual meeting is designated as Specialty Day. Traditionally this day is focused on hand therapy oriented topics. To that end, it has taken on many different formats over the years.

Working together with Jesse Jupiter and David Ring, we designed this year's Specialty Day as two concurrent programs. One program was a freestanding day of panels and presentations aimed at topics of interest for Hand Therapists. Concurrently, was a surgeons program of scientific paper presentations and panels. Both programs also offered hands-on workshops in the afternoon. In keeping with AAHS's spirit of collegiality between therapists and surgeons, the two programs were combined for the early morning instructional courses, President's and program chair welcome, and invited guest lecture.

The innovative and dynamic surgeons program consisted of panels that used 2 minute scientific papers as a springboard for discussion of various topics. Topics covered on specialty day were arthritis, DRUJ and carpal mal alignment, and distal radius fractures.

This stimulating format continued on throughout the next several days of the program. The surgeons afternoon was a hands on workshop on principles of internal fixation of the wrist and hand.

The theme of the therapist program was "Moving Toward Recovery" and examined the role of movement in relation to a wide variety of therapy procedures. The first panel was a lively discussion between surgeons and therapists regarding early motion after finger fractures.

This was followed by another surgeon / therapist panel examining the extensor tendon rehab and the science behind early motion protocols. The theme of motion was further explored via presentations on Nerve Mobilization, and Graded Motor Imagery.

An exciting new addition to Specialty Day was the participation of ASHT in our program. ASHT offered a panel on treatment of complex injuries. Always a fascinating topic, and this time was no exception. On a related note, AAHS and ASHT have been working to develop a closer relationship. A result of these efforts was ASHT participating in our Specialty Day. In addition, AAHS is now sponsoring an AAHS physician speaker to the ASHT annual meeting

Therapists finished out their afternoon with an interactive shoulder workshop that looked "beyond rotator cuff" exercises. This not only looked at traditional approaches to shoulder rehab also looked at the integration of alternative approaches such as core stabilization and pilates into a treatment program. Judging by the excellent attendance and the fact that therapists stayed to the very end, if not longer, I think it's safe to say it was very well received.

In the midst of Specialty Day and it's "science" the two programs joined together for an entirely

## Sharon Andruskiwec, PT, CHT

different experience. Invited Guest Lecturer, Dr. Eduardo R. Zancolli, took us on a spiritual-like journey exploring "The Mystery of Coincidences" that he has observed in his life journey. Something we can all reflect upon.

I would like to acknowledge Dr. Jupiter, Dr. Ring and the meeting committee, who all worked so hard to organize this meeting. Thank you to the many speakers who so willingly volunteered their time and talents. Finally, kudos to the people from our business office, PRRI, who worked tirelessly behind the scenes successfully handling the multitude of details involved in running a meeting.

Overall, the day and the entire week, was packed with fast paced, stimulating, and thought provoking materials. No less important were the numerous opportunities available for members to gather and exchange ideas in more informal venues - a hallmark of AAHS and it's annual meeting. Whether it be at the mentors reception for new surgeons and therapists, welcome reception, coffee breaks, gala, exhibit hall, workshops, or poolside, AAHS members took full advantage of the chance to exchange thoughts, reunite with old friends and make new acquaintances. I look forward to continuing these personal and professional growth experiences in Hawaii in 2014.

AAHS meeting registration: \$500- \$800. Knowledge, networking and relationships available through attending the annual AAHS meeting..... priceless!

**Overall, the day and the entire week, was packed with fast paced, stimulating, and thought provoking materials.**



## CODING CORNER: CURRENT PROCEDURAL TERMINOLOGY (CPT)

This issue of Hand Surgery Quarterly features an interesting panel titled, "Common Elbow Problems Seen in the Office." As a reflection of this discussion, we will examine common surgical Current Procedural Terminology (CPT) codes for elbow disorders. Elective surgery and reconstruction—not trauma—will be our main focus.

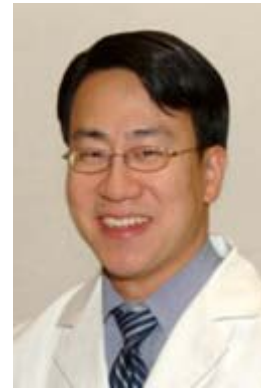
### Elbow Arthroscopy

One of the most common indications for elbow arthroscopy is the removal of loose bodies. Loose bodies in the elbow can be associated with a variety of conditions, including osteochondritis dissecans, valgus extension overload, trauma, osteoarthritis, and synovial chondromatosis. CPT 29834 is used to reflect elbow arthroscopy with the simultaneous removal of loose

bodies. For symptomatic plica, elbow arthroscopy can confirm its presence and expedite treatment. CPT 29835 can be used to reflect a partial synovectomy. When performing a complete synovectomy to treat rheumatoid arthritis, for example, the work of the complete synovectomy is rewarded with CPT 29836. This is also the same code used for arthroscopic anterior and posterior capsular releases.

For those of us who perform arthroscopic releases for lateral epicondylitis, CPT 29837 is used. Finally, arthroscopic surgery for osteochondritis dissecans usually includes joint debridement; removal of loose bodies; drilling of the lesion; and arthroscopic-assisted fixation of large, full thickness defects. CPT codes 29834 and 29837 reflect the work involved in treating these problems.

A few of us may perform arthroscopic excision of the radial head or excision of the



Eon K. Shin, MD

olecranon bursa. Unfortunately, these procedures are not listed under designated CPT codes and are generally coded with CPT 29999 (unlisted procedure, arthroscopy).

### Medial/Lateral Epicondylitis

In treating patients with lateral epicondylitis using a more traditional open incision, CPT 24358 bills for extensor tendon debridement as well as bony debridement/drilling. The same code is also utilized for medial epicondylar debridement. CPT 24359 is used to represent lateral epicondylar debridement with tendon repair or reattachment. If a percutaneous technique is used

(continued on next page)

**When performing a complete synovectomy to treat rheumatoid arthritis, for example, the work of the complete synovectomy is rewarded with CPT 29836.**



## American Association for Hand Surgery

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<http://handsurgery.org/members/>

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- ♦ Full access to *HAND*, the official Journal of the AAHS.
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- ♦ Update and verify your Member Record for efficient and effective communication. Please be sure to note your specialty so your colleagues can find you!

to debride or “release” the diseased tendon areas, CPT 24357 is used to reflect this minimally invasive approach.

### Cubital Tunnel Syndrome

Cubital tunnel releases can be billed a variety of ways depending upon the technique used. For a cubital tunnel release done in situ, CPT 64718 is utilized. When a subcutaneous or submuscular transposition is performed, modifier 22 should be added to CPT 64718 to reflect the extra work of nerve manipulation and subsequent transposition. The extent of the additional work needs to be carefully described within the operative report to improve the odds of appropriate reimbursement. An alternative technique is to use CPT 24999 (unlisted procedure) to code for the ulnar nerve transposition. When performing a medial epicondylectomy in conjunction with a cubital tunnel release, CPT 24356 (fasciotomy, lateral or medial; with partial ostectomy) with modifier 51 is appropriate.

### Elbow Reconstructive Procedures

Finally, this section deserves mention of arthroplasty procedures around the elbow. For unipolar or bipolar arthroplasty of the radial head, CPT 24366 is used. One important caveat: If a radial head arthroplasty is performed for a terrible triad injury, use CPT 24666 to reflect open treatment of a radial head or neck injury using a radial head prosthesis. This code can also be used when open fixation or radial head excision is performed. Of course, appropriate CPT codes for lateral collateral ligament repair (24343) versus reconstruction (24344) should be included as well.

Use of a static external fixator warrants the use of CPT 20690, which brings in 8.65 Relative Value Units (RVUs). Placement of a hinged external fixator necessitates CPT 20692, and the extra time, work, and expertise needed to place a hinged fixator is rewarded with 16.00 RVUs—a substantial increase over placement of its static counterpart.

Total elbow arthroplasty is coded with CPT 24363, while a distal humeral prosthetic replacement can be billed with CPT 24361. Of course, any revision arthroplasty procedure warrants the inclusion of modifier -22 to reflect the additional work needed to complete this complex procedure. In cases of bone loss, CPT codes 20900 (bone graft, minor or small) and 20902 (bone graft, major or large) are used.

Finally, we are well aware that distal biceps tendon repairs—when performed for acute injuries—are coded CPT 24342. For chronic distal biceps tendon injuries, the extra work of reconstruction is only rewarded by the use of modifier -22. However, distal biceps tendon reconstructions frequently necessitate neuroplasty of the lateral antebrachial cutaneous nerve to help address pre-operative pain symptoms. This work is reflected by the use of CPT 64708 (neuroplasty, major peripheral nerve, arm or leg).

(continued on next page)

## HAND SURGERY ENDOWMENT



The Hand Surgery Endowment has adopted a primary mission to promote global hand health. The Endowment’s initiatives to support this mission include providing research grants, supporting international volunteerism activities in collaboration with Guatemala Healing Hands Foundation and Health Volunteers Overseas, and granting the AAHS Vargas International Hand Therapy Teaching Award.

The HSE Board of Governors hopes to expand on its offering in the years ahead. Please consider making a contribution to HSE and its primary mission to promote global hand health at <http://handsurgery.org/endowment>. Contributions are tax deductible and donors are acknowledged annually for their generosity at the AAHS Annual Meeting.

**Click here to DONATE ONLINE**

<b>Elbow Arthroscopy</b>	
29834	Arthroscopy, elbow, surgical; with removal of loose body or foreign body
29835	Arthroscopy, elbow, surgical; synovectomy, partial
29836	Arthroscopy, elbow, surgical; synovectomy, complete
29837	Arthroscopy, elbow, surgical; debridement, limited
29838	Arthroscopy, elbow, surgical; debridement, extensive
29999	Unlisted procedure, arthroscopy

<b>Lateral/Medial Epicondylar Debridement</b>	
24357	Tenotomy, elbow, lateral or medial; percutaneous
24358	Lateral or medial epicondylar debridement, soft tissue and/or bone, open
24359	Lateral or medial epicondylar debridement, soft tissue and/or bone, open with tendon repair/reattachment

<b>Cubital Tunnel Release</b>	
64718	Neuroplasty and/or transposition; ulnar nerve at elbow
24356	Fasciotomy, lateral or medial; with partial ostectomy
24999	Unlisted procedure, humerus or elbow

<b>Elbow Arthroplasty</b>	
24160	Implant removal; elbow joint
24360	Arthroplasty, elbow; with membrane (e.g. fascial)
24361	Arthroplasty, elbow; with distal humeral prosthetic replacement
24362	Arthroplasty, elbow; with implant and fascia lateral ligament reconstruction
24363	Arthroplasty, elbow; with distal humerus and proximal ulnar prosthetic replacement
24366	Arthroplasty, radial head, with implant
24666	Open treatment of radial head/neck fracture with radial head prosthesis

<b>Elbow Stabilization and External Fixation</b>	
24343	Repair lateral collateral ligament, elbow, with local tissue
24344	Reconstruction lateral collateral ligament, elbow, with tendon graft
24345	Repair medial collateral ligament, elbow, with local tissue
24346	Reconstruction medial collateral ligament, elbow, with tendon graft
20690	Application of a uniplane, unilateral, external fixation system
20692	Application of a multiplane, unilateral, external fixation system
20693	Adjustment or revision of external fixation system requiring anesthesia
20694	Removal, under anesthesia, of external fixation system

<b>Distal Biceps Tendon Repair and Reconstruction</b>	
24342	Reinsertion of ruptured biceps or triceps tendon, distal
	Apply modifier -22 for reconstructions of chronic distal biceps tendon injuries

## From the President (continued from page 1)

active intraoperative movement anesthesia. Also, early true active post-operative movement (as opposed to place and hold) is gaining ground rapidly in Brazil, as it has in the United Kingdom.

### Hawaii will be a Great Meeting

Kauai is a true gem; beautiful and unspoiled. You may not get another chance to go there to enjoy both work and leisure. The annual meeting is in January 2014.

The educational program will be outstanding. Ten iconic speakers in hand surgery will give you 5 minutes of their best lifelong tips in hand surgery and therapy to improve your practice in a plenary panel.

The first day will include a panel on the latest developments in Dupuytren's needle aponeurotomy, enzymes (the next generation of methods of use), and stretching with digit widget, splints and therapy. Now that these methods of treatment are here and found to be working, we will look at the latest and best ways to use them for improvement in our patient outcomes. The latest developments in surgery for awake vs. sedated flexor tendon repair as well as true active movement vs. place and hold will be debated.

The same format of highly rated short papers with discussion by respected experts, as we had in Naples this January, will be repeated in Kauai with the addition of therapists in the panels for practice changing discussions.

Dr. Bill Magee will warm your (and your spouses and children's) hearts with his awesome speaking style and stories as our guest

*I would like to thank all of those surgeons who have expressed an interest in spending two weeks in Kumasi, Ghana to share knowledge in hand surgery with the surgeons and residents of orthopedic, plastic and general surgery who look after hands there.*

speaker. Internationally renowned Dr. Jin Bo Tang is also a keynote speaker and has assembled a group of the finest English speaking Chinese hand surgery experts to give us an eye opening Asian perspective on

new techniques. Dr. Elizabeth Hagert will surprise and impress you with new thoughts and concepts as the Danyo speaker.

### Ghana Reverse Fellowship

I would like to thank all of

those surgeons who have expressed an interest in spending two weeks in Kumasi, Ghana to share knowledge in hand surgery with the surgeons and residents of orthopedic, plastic and general surgery who look after hands there. This will greatly help education in West Africa. This is an area of the planet where this type of help will greatly benefit.

### Hand Surgery Endowment

Our Hand Surgery Endowment is now focused on global hand health. If you are not able to give your time to help train or treat hand surgery for those less fortunate than we are in North America, consider giving to the Endowment when you register for the meeting.

NOW ACCEPTING ABSTRACTS

## AAHS ASPN ASRM ANNUAL MEETINGS

**Abstract Submission Deadline: SUNDAY, JUNE 30<sup>TH</sup>, 2013**

We welcome the submission of your abstract for the 2014 Annual Meetings of AAHS, ASPN and ASRM. Please visit the websites below for abstract submission instructions. For more information and details about abstract submission, please call the numbers below.

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Meeting registration materials will be available in September.

WE LOOK FORWARD TO SEEING YOU IN KAUAI!

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*HAND* is the official journal of the American Association for Hand Surgery. *HAND* is an international peer reviewed journal which combines multidisciplinary expertise from surgical, medical, hand therapy and other specialties to advance the quality of care and health of patients with hand and upper extremity pathologies.

Download the *HAND* journal mobile app! The app is available to AAHS members for download on Apple devices in the App Store by searching for "HAND Journal" or "AAHS Journal", or by scanning the QR code below, and provides instant access to all current and past issues of the journal.

Once the app has downloaded to your device, you will need to login with your personal AAHS username and password once for authentication (contact the AAHS administrative office to obtain your personal username and password).

Members can use the app functions to browse volumes and full text articles, search for work by specific authors, and more.



## Vargas Award Committee Accepting Applications for a 2014 Vargas Mission!

### What is the Vargas Award?

The Vargas International Hand Therapy Teaching Award is named in honor of Dr. Miguel Vargas, a hand surgeon who practiced in Puerto Rico and was an international emissary for education. The grant is an outgrowth of the AAHS's mission and its intent is therapy outreach - to foster an exchange of educational ideas between therapists in the AAHS and in the host country to result in improved patient care for upper extremity problems. Education is the foremost purpose and mission, with a portion of the trip emphasizing hands-on postoperative care of the upper extremity in host countries where surgery is applicable and possible.

The Vargas Award is bestowed annually to an AAHS hand therapist member. One grant reimbursing up to \$5000 in trip-related expenses, including supplies

needed for the mission, will be made to the therapist recipient for a mission in 2014.

### 2014 Vargas Mission Sites

The Vargas Award Committee is currently accepting applications for a mission in 2014 to Guatemala (facilitated through Guatemala Healing Hands Foundation), Nicaragua, Peru, or St. Lucia (Nicaragua, Peru, and St. Lucia missions are facilitated through Health Volunteers Overseas; the selected recipient must become a member of HVO for a nominal fee). For more information visit <http://handsurgery.org/volunteerism/vargas.cgi> or contact the AAHS administrative office at 978.927.8330.

### Who can apply?

The Vargas Award will be granted to an AAHS hand therapist member currently practicing in the area of hand therapy. A practicing hand

surgeon may also volunteer for a mission; however, no funding will be awarded to surgeons.

### Application deadline:

June 10, 2013

## 2013 AAHS Research Grant Recipient

**Sarah Pixley, PhD**  
University of Cincinnati  
Cincinnati, OH

*Peripheral Nerve Repair with Bioresorbable Metal*

## AAHS Members Named IFSSH Pioneers of Hand Surgery in 2013

At the 2013 IFSSH/IFSHT Triennial Congress in India, Drs. Robert Beckenbaugh and Alan Freeland were recognized by an international audience as Pioneers of Hand Surgery, a longstanding custom of the Federation which dates back to the 3<sup>rd</sup> Congress held in Tokyo in 1986.

To learn more about Dr. Beckenbaugh and Dr. Freeland, please read their bios below. To learn more about the IFSSH Pioneers of Hand Surgery, visit <http://www.ifssh.info/pioneers.html>.

**Doctor Beckenbaugh** has had a keen interest in hand and wrist joint replacement as an area of special interest during his career. His earliest involvement included assessment of the safety of the use of methylmethacrylate cement in total joint replacement in the late 1960s. In fact, his original work with Doctor Mark Coventry on total hip arthroplasty in 2000 patients was submitted to the FDA in 1971, directly leading to the FDA's first approval of the use of cement in total joint arthroplasty. Subsequently, his expertise was focused on hand surgery at the Mayo Clinic after his fellowship with Doctors Ron Linscheid and Jim Dobyns. His initial investigations involved review of the function and longevity of silicone hand implants.

During the mid 1970s, Doctor Beckenbaugh and colleagues evaluated many of the newly

developed polyethylene and metal prosthesis for the hand and wrist, identifying various types of prosthetic and fixation problems. As a result, Doctor Beckenbaugh and his colleagues developed some of these devices and new implants. Some of the early models represent the currently marketed SR replacement prostheses for the MCP and PIP. By 1980, Doctor Beckenbaugh had designed the first ellipsoidal total wrist arthroplasty (the Biaxial Total Wrist Arthroplasty) which was used extensively through the late 1990s. Doctor Beckenbaugh's major interest in joint development was with pyrocarbon as a cementless prosthesis. This work was started in 1978 at the MCP level and continued through 1987 as a total joint prosthesis at the MCP level. After a period of delay related to original FDA lack of support, the revised implants were approved by the FDA in 1999. Subsequently, his interest in pyrocarbon has continued with the development of pyrocarbon prostheses for the thumb CMC, the digit PIP, and other devices for the distal ulna. This work continues through the present time.

**Dr. Freeland** received his BA from Johns Hopkins University in 1961 and his M.D. from George Washington University in 1965. He completed his internship and one year of general surgery residency at Church Home and Hospital in Baltimore from 1965-1967. He was a Fellow in Neurosurgery and a Fellow and Resident in Orthopaedic Surgery at Johns Hopkins Hospital from 1967-1971. He entered the United States Army in 1971. After spending a year on the Orthopaedic Surgery Service at the 121<sup>st</sup> Evacuation Hospital in Soule, Korea, he completed orthopaedic training at Letterman Army Medical Center in San Francisco. He later became Chief of Orthopaedic Surgery at the U.S. Army Hospital at Fort Campbell, KY from 1976-

1977. He completed a Hand Surgery Fellowship at the University of Miami/Jackson Memorial Hospital in Miami, FL. He came to the University of Mississippi Medical Center in 1978 and achieved the rank of Professor in 1986. He served as Chief of the Medical Staff at UMC from 1986-1987 and in the same capacity at The Mississippi Methodist Medical Center from 1994 through 1995. He established the Hand Fellowship Program in the Department of Orthopaedic Surgery in 1991 and served as Director from 1991-2004. He is a Past President of the Jackson Orthopaedic Society, the Mississippi Orthopaedic Society, the Southeastern Hand Club, and the American Association for Hand Surgery. He was chosen American Association for Hand Surgery National Clinician-Teacher of the Year in 1998. He was the Vargus International Traveling Physician for the American Association for Hand Surgery in 1998.

Dr. Freeland has published numerous articles and chapters and has lectured extensively on topics within his specialty both nationally and abroad. He authored *Stable Fixation of the Hand and Wrist* in 1986, *The 25 Year History of The American Association for Hand Surgery* in 1995, and *Hand Fractures: Repair, Reconstruction, and Rehabilitation* in 2000. He served as

*(continued on page 17)*



**Robert D. Beckenbaugh, MD**



**Alan E. Freeland, MD**

## Panel Discussion:

### Common Elbow Problems

**Scott:** What is the best treatment for the 50-year old laborer with post-traumatic arthritis of the elbow?

Scott: And let me provide an example. Imagine you have a patient that had a radial head fracture and a small coronoid fracture, and the radial head is excised, and the coronoid fracture is not fixed because it's a small type one coronoid fracture, and the patient's now seen approximately two to three years later with pain in the elbow and on x-rays and CT scans you can see an obvious ulnohumeral arthrosis, in this patient, who's a laborer, who's active, what do we think in 2013 would be the treatment of choice? Eric can you start with that?

**Eric:** I think the first thing you want to do is get the completed history, a good exam, and make sure you're not missing something else, such as induced instability from his previous surgery or even a simple epicondylitis. And then of course,

try to see if he can limit activities or if the use of anti-inflammatories helps with his symptoms. I think when you're talking about the next step, which may be surgical, I think it's important to try and figure out if he's having pain all the time, if he's having mechanical symptoms such as a loose body or something of that nature, and if he's having impairment with his range of motion. I think you can consider an elbow arthroscopy and removal of loose bodies, and possible debridement of chondral surfaces or some spurring, if present. The other surgical option is if he is having a lot of pain, especially at terminal extreme range of motion and there is decreased range of motion associated with that, then I think a very good procedure would be some type of ulna-humeral arthroplasty.

**Scott:** And what were some of the other panel members think about this type of patient?

**Mark:** There is a difference for me if dealing with a very stiff elbow that has 40-50 degree arc of motion versus one that has a functional arc of motion, maybe 100-110 degrees. I want to know if they are having pain extremes of flexion and extension. I find a CT scan to be very helpful in this instance to determine the degree of wear in the ulnohumeral joint, the location of osteophytes and the presence of loose bodies. If is the patient has pain throughout the arc of motion and the CT scan shows obliteration of the joint's surface, then I think you have a challenge in a 50-year old laborer. In this instance I would be thinking about interposition arthroplasty.

**Scott:** Do others contemplate possibly doing a formal elbow replacement or a hemiarthroplasty, or possibly a radiocapitellar replacement...a half hemiarthroplasty so to speak?

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#### The Panel

**Scott Steinmann, MD, Moderator**

Professor of Orthopedic Surgery, Mayo Clinic, Rochester, Minnesota

**Mark Baratz, MD**

Chief of Hand and Upper Extremity/CMI, University of Pittsburgh Medical Center, Washington, Pennsylvania

**Eric Hofmeister, MD**

Chairman, Department of Orthopedic Surgery, Naval Medical Center San Diego, California

**Jorge Orbay, MD**

Director, Miami Hand & Upper Extremity Institute, Miami, Florida

## Hand Table

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**Jorge:** I would, depending on the type and severity of arthritis. If he doesn't have a radial head, you might consider trying to stabilize the elbow by giving him a radial head. The problem is that the radial head will now articulate against a diseased capitellum, one that hasn't bore weight for a long time.

**Scott:** Two years.

**Jorge:** It's not something that I think anybody has much experience doing, but will be one thing to consider, just a radial head replacement. My experience with the post-traumatic elbows, is that you can never give them a normal elbow back. Like I mentioned before, if there is mechanical impingement from a loose body, you can only try to help them. But there's no way we can give somebody a normal elbow at 50 years of age, being a laborer and having post-traumatic arthritis.

**Scott:** I would agree Jorge. In my experience, a potential...I think a radial head replacement might be a reasonable option if the capitellum is in good condition. I have used a radiocapitellum replacement to unload the lateral aspect of the ulnohumeral articulation, which is often most involved when the medial part of the ulnohumeral articulation is relatively well preserved as a way to kind of lead yourself down the road to potentially avoid a formal arthroplasty, but maybe in five to ten years consider when he's retired, or 60 or 65, consider a formal replacement, but in my hands, sole elbow arthroplasty has not been a successful undertaking in the person age 50 or 55, even if you tell them what their limitations are going to be. We ask the patient a couple of years after an elbow replacement - do you know what your limitations are that we told you? And they all got it, for the most part, correct, but then I

said are you doing these limitations and they all said oh no, when snow comes down here in Minnesota, I have to shovel the snow, no one's going to shovel the snow for me. So you have to look at what the patient is ultimately going to do. You just can't give limitations and therefore a formal replacement is not that successful, but I think in some ways what we're saying in this patient is very difficult to work with, we don't have a great answer, it's not like a total knee in a 50 year old, or a total shoulder for that matter, and that we have to be careful, each patient's an individual, and sometimes a radiohumeral replacement, sometimes arthroscopy, sometimes interposition are options for these patients.

**Scott:** The next question is should we repair the MCL in a terrible triad fracture dislocation?

**Scott:** I think what we're talking about in that situation is there's obviously, with Valgus injury to the elbow, if you fix or replace the radial head, which is the most obvious injury, when we examine most of these patients under anesthesia with fluoroscopy, the medial side opens up to Valgus stress quite readily, and we tend to either replace or fix the radial head. But should we also be doing something on the medial side? What do you think Jorge?

**Jorge:** Well, I tried that many years ago, and my experience doing medial collateral ligament repairs was that the elbow did not appreciate it, they developed more stiffness and heterotopic ossification. So I stopped going medially, and I repair only laterally.

**Scott:** Are there other thoughts?

**Jorge:** I also like to stabilize them with an internal joint stabilizer, which is a rigid form of stabilization that provides medial and lateral side stability. **Scott:** Why don't you describe that a little bit more Jorge?

**Jorge:** The internal joint stabilizer is really a very simple concept... you



*So you have to look at what the patient is ultimately going to do. You just can't give limitations and therefore a formal replacement is not that successful, but I think in some ways what we're saying in this patient is very difficult to work with, we don't have a great answer ....*

**-Scott Steinmann, MD**

can actually manufacture one with a Steinman pin. It's like an external hinged fixator but placed underneath the skin. It is applied by drilling a hole in the humerus through the axis of rotation. That's easier to do when you have the elbow totally exposed during a reconstructive procedure. But in the acute trauma situation you often want to expose only laterally. You have to get the humeral axis of rotation right by drilling with a guide. Then you place an axis pin through that hole and connect it to a plate on the ulna by a rigid arm. I've shown this concept around, which you may probably have seen it and I'm trying to develop it into something that is accessible to everybody.

**Scott:** And the advantage is that you can avoid having a formal - outside so to speak - external fixation, but it keep under the skin, and then take this out several weeks down the line?

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## Hand Table

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**Jorge:** That is correct. Usually around six weeks.

**Eric:** I think in the most part I agree. You want to make sure you get a stable elbow that you're able to begin early range of motion. Often there is slight gapping, and I think it's okay to leave those and think the literature would support that decision. However, if it's grossly unstable and if there is any reason that they have medial instability and you're afraid to move them early and aggressively, then that would be the indication to fix or repair the MCL.

**Scott:** Mark, and further thoughts?

**Mark:** There isn't one thing that I will do every time. If I feel that I adequately restore stability by fixing the coronoid, placing a radial head and doing a good repair of the lateral complex I won't touch the medial side. It requires having a good anteromedial buttress in the form of an intact coronoid anteromedial coronoid. There is a subset of patients that I personally struggle with, and it tends to be heavy set women in the perimenopausal age group. If that person isn't stable after I've fixed the coronoid, replaced the radial head and repaired the lateral complex, I decide whether there is an advantage to go to the medial side. I will do that recognizing that there may be some heterotopic bone formation, and recognizing that it may not be enough. In other instances, when I just feel that there's very little connection between the upper arm and the forearm because of extensive soft-tissue stripping, I will go directly to a static external fixator.

**Eric:** Sure. When should we use an elbow external fixation device? What is the role of static or hinged fixation?

**Scott:** And as we know over the years we've struggled with this topic, and in my own practice, I've

found that the end of a complex [elbow] reconstruction fracture reconstruction that then the labor of trying to put a hinge fixator on, after many complaints from other physicians, about six years ago or so I switched to doing a static fixator which I think most orthopedic surgeons can put on within half an hour as opposed to an hour to an hour and a half with the hinge. I have been reasonably happy with the results and curious what panel members' thoughts are on this subject.

**Eric:** I agree with you Scott. I think that a static fixator is going to manage the situation nicely in the vast majority of instances. If it hasn't been a horribly long time, I still will put in an axis and use the same sort of low profile easy to put on fixator, whether it's static or dynamic, I'll see if I can hit that axis pin, and if it comes easily and the elbow flexes and extends without opening, then I'll take use it as a hinge fixator, but I won't fiddle with it for a long time.

**Scott:** And I'm curious, Jorge, your internal fixator, how...that sounds very exciting. How do you compare that to standard hinge or static?

**Jorge:** The difference with hinged fixators is that the internal stabilizer is very close to the bony surface. The moment arms are much smaller, so it is very rigid. It is easily applied using an "antler guide" that covers two thirds of a circle. You slip it over the waist of the trochlea and push it medially until it settles on the medial side finding the center of the trochlea. The lateral side is easy to gauge by marking the center of the capitulum. In the past when I used a hinged fixator, it was very difficult to get the axis of rotation right. There was pain due to motion of the skin against the pins. The static fixators work well but I think the internal hinge is better as it allows early motion.

**Scott:** Eric any thoughts from your practice?

**Eric:** I have to agree with everything that's been said. I've put on very few hinged external fixators, and they are incredibly difficult to get it absolutely perfect, allowing for full motion. The few times I've used them is only after a difficult elbow reconstruction that still was just not stable despite fixing everything that I thought we could fix. But I really like the idea of putting on (as Mark was mentioning) a static external fixator that you could turn in to a hinge, so using a much more simple one, and putting the hinge right at the center rotation, that way you could actually take a static external fixator and loosen it at some point. I think if I understood you correctly, Mark, you could actually range of motion through that and then relock it.

**Mark:** I will take 10 to 15 minutes to get an axis pin appropriately aligned so that the fixator can function as a hinge either immediately, or in a delayed fashion. If I'm able to achieve a good axis of rotation for the fixator, then I'll treat it as a hinge either right away or later on. If I can't easily place an axis pin, then place the frame as a static fixator. I typically will leave a static fixator on for about three weeks.

**Scott:** In my practice when I use a static fixator, I usually leave it on for anywhere between three and six weeks, depending on the injury. But I would add that because it's relatively simple to put on. My threshold for putting a fixator on is lower than when I only used hinged, where I would groan and say, oh my, I guess we should probably spend another hour in the operating room putting a hinged fixator on. So it...I'm more comfortable relatively quickly putting a fixator on, although I would like to hear more and see the results of Jorge's internal fixator, so to speak, in the future.

Well this kind of brings us to the next subject that we're talking about CPM.

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## Hand Table

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There have been attempts using fixators actually, putting fixators on to try and increase range of motion [Bob Hotchkiss] and others have looked at. And the post-operative patient that is kind of having issues in range of motion, or let's say, we do an open release of a stiff elbow, and it's now you're leaving the operating room, and you've done an open release, you've had a successful release of the elbow, removing perhaps some heterotopic bone and scar, what is the panel's preference on, and when would they start mobilizing this patient [in this spot?] Perhaps start with Jorge?

**Jorge:** Yes. We now use mostly therapy. We did experiment with CPMs several years before, but they were expensive and cumbersome.

**Scott:** And Mark?

**Mark:** I do not use CPM. I let the wound define when I start motion. If the release has been arthroscopic, those patients can start gentle motion immediately. They are checked in a couple of days, if the wounds look good they start they start therapy. If it's been a big extensive release, my worry with moving them too early is hematoma formation. When this occurs the collection must be drained in the office or the operating room. I proceed more slowly with post-operative motion which can compromise the ultimate result. So for me, the timing of mobilization depends a lot on the progress of the wounds.

**Scott:** Eric, your thoughts on how to proceed with such a patient?

**Eric:** I almost always admit patients for a couple days, use some type of regional anesthetic block, either a long acting or a likely indwelling catheter, and again, just like others have mentioned, either that night, or if really big incisions or big wounds, wait until the next morning, but get them aggressive involved in therapy. We actually

get patients in with a therapist two to three times a day starting the next day, and usually keep them in the hospital for two or three days. As was mentioned, I have not had much luck with CPMs either, they tend to be very large and bulky and not quite really fit the patient very well. I think one of the things to do beforehand is really make sure you've got the motivated patient that's going to go on and continue to do very aggressive home therapy and is going to see their therapist on a very regular basis.

**Scott:** In my practice, I haven't used CPM probably for about a couple years now. It's hard to find any good literature to support for or against CPM in the elbow. We have very good literature in the knee, mainly in the arthroplasty literature showing that when you look at patients six months or a year later, that those patients that had CPM early on in the hospital and post-hospitalized periods, there's no difference in knee range of motion at one year. And I have found that in my practice using a splint has been quite helpful, and in the active farmer or laborer, telling them to



*So, for me, it really comes down to knowing what part of the coronoid is injured, whether it is an isolated coronoid fracture, or associated with a radial head fracture then an intraoperative examination under fluoroscopy to combine the effect of the broken bones with the instability created by the associated soft-tissue injury.*

- Mark Baratz, MD

get back to work has been quite helpful. I remember one patient with a coronoid fracture that I treated, I gave him splints, and he came back, he had perfect range of motion. I was so happy with myself and I told the patient, see, that's why I gave you splints, you worked very hard, I'm glad you went and used your splints. And he said doc, I didn't use your splints at all. I went back to work and my motion...I got it on my own. So in my own practice I'm still unclear even who I should use splints on. I've spoken to some other elbow surgeons around the world and they've sort of taken the approach that no matter what you do, it really depends on the motivation of the patient and the inherent scarring or reforming of bone in that particular individual. So I think to summarize, we don't have the answer. There are those that believe firmly in that CPM is effective. Those that insist on exercises and splinting, and in my practice I have to say I'm not sure what the correct answer is for 2013 on our patients, other than clearly some motion and some therapy is definitely helpful in the post-operative period.

**Eric:** Sounds like we all agree that a highly motivated patient is also one of the criteria for a good outcome.

**Scott:** Correct.

**Scott:** Should all coronoid fractures be fixed? Mark, your thoughts first?

**Mark:** The single asset in understanding what I am dealing with regard to a coronoid fracture is the CT. The work that you, Julie Adams and Shawn Driscoll have done has helped us understand the patterns of injury. So, for me, it really comes down to knowing what part of the coronoid is injured, whether it is an isolated coronoid fracture, or associated with a radial head fracture then an intraoperative examination under fluoroscopy to combine the effect of the broken bones with the instability created by the associated soft-tissue injury.

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## Hand Table

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**Scott:** Eric, your thoughts?

**Eric:** I agree with Mark that a CT scan is very valuable, but I would say the biggest determining factor for me whether they require an operative treatment is an exam, range of motion and stability—either at the time of their first initial evaluation, or which may need to be done under some type of intraarticular injection. If it is also in the setting of a simple posterior elbow dislocation that you reduce in the ER and a very small coronoid is present, you can range it, and they have full range without any instability, that is the single most important determinant for me.

**Scott:** Jorge, your thoughts?

**Jorge:** I would like to add that medial facet fractures are mostly unstable and should be fixed. Central coronoid fractures associated with posterior dislocations should be fixed only if the elbow is unstable after fixing or replacing the radial head.

**Scott:** In my practice as Jorge has just pointed out, the anteromedial fractures that involve more than third of the sublime tubercle. I've treated a number of undisplaced coronoid fractures that involve the anterior one third and either fix the associated radial head fracture or the lateral ligament disruption, and they have done fine without a large medial approach. The ones that I am concerned about are those that get into the sublime tubercle more than 1/3 that have also displaced. We have also seen patients that have had half the sublime tubercle fracture but for whatever reason it is not displaced. You know, once those patients are cared for non-operative treatment, I am surprised or maybe not surprised on how it has healed without intervention on the medial side. The ones that have involved a displaced fracture of the sublime tubercle and probably two-thirds of it.....those are the ones I

have been aggressive about fixing. I would also say something I have learned over the past few years is a comminuted coronoid fracture that is in two or three pieces because of the nature of the bone and the curvature and the small bony fragments involved, I have been unsuccessful in fixing comminuted coronoid fractures and have been unable to put back together. So, I have used the 3D CT as we have spoken about as a way to determine this. In some cases, I will use the ex fix to unload the [sic] coronoid to allow it to heal and fix whatever I need to do on the lateral side. Any thoughts from the panel?

**Eric:** Sometimes if it is a comminuted coronoid.....if you can just suture some of the capsule in addition to the comminution with a lasso technique and that will lend a tremendous amount of stability to your elbow reconstruction.

**Jorge:** Yes. The internal joint stabilizer will help you there too.

**Scott:** Yes, I think that would be an excellent option to use the internal joint stabilizer.

**Eric:** Sometimes even if it is a comminuted coronoid.....if you can just grab some of that with a lasso technique and, that will lend a tremendous amount of stability to your elbow reconstruction.

**Scott:** When should we use elbow replacement for distal humerus fractures?

**Scott:** As you know, there has been some articles in the literature, but surprisingly there are a very few articles actually addressing this. There is one multicenter study from Canada, another from Florida. There are numerous studies looking at cohorts of treatments of either fixing or replacing the humerus fractures, but there really aren't a lot of controlled studies looking at two separate groups. So, with that as a preamble, Mark, any thoughts on your approach to say you have a healthy vibrant 72 year old who falls and breaks her distal humerus. She still likes to do gardening and a

lot of activities around the house. How would you approach that patient.....how would you work that patient up and when would you decide, fix, and replace that patient?

**Mark:** So, early in my practice, I was a very avid proponent of arthroplasty for older patients with comminuted fractures that looked like they would be difficult to reconstruct. My enthusiasm has waned and it has been born of early failures with total arthroplasty, particularly in active individuals. So, I would treat this 72 year old, a person who is independent and active, in the same way that I would treat Jorge. I would do whatever imaging I thought was appropriate to understand the fracture, and I would approach that fracture, being prepared for both open reduction and internal fixation, and the possibly of elbow arthroplasty. My number one goal is to rebuild their humerus. If that is not a viable option, then I would convert to an elbow replacement.

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*... a CT scan is very valuable, but I would say the biggest determining factor for me whether they require an operative treatment is an exam, range of motion and stability—either at the time of their first initial evaluation, or which may need to be done under some type of intraarticular injection.*

- Eric Hofmeister, MD

## Hand Table

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I'd do that by making an incision on the back of the elbow, leaving the triceps attached to the olecranon and then making two windows, one medial and one lateral I'd use those windows to assess the bone and assess the joint surface. If it looked like it was something that could be reassembled, I would consider an olecranon osteomy if I was unable to adequately see the joint. If it looked like it was a fracture that could be reassembled, convert an elbow arthroplasty.

**Scott:** Eric, your thoughts?

**Eric:** I see very few elderly people with distal humerus fractures in my practice, and generally due to the life long restrictions, I will try to fix with rigid internal fixation if possible unless they really are a low-demand type patient. I think the other group you have got to be a little worried about with a total elbow is the patient that has already had a total shoulder replacement and if you have enough room for a stem coming up from the distal humerus or if it is going to lead a stress riser. .

**Scott:** Jorge, your thoughts?

**Jorge:** I do see a fair number of elderly people in their 80s and my experience is that total elbow replacement in these patients do better than in rheumatoids. My experience with rheumatoids is that they had a very high complication rate, especially with infection. I just started doing total elbow replacements for acute fractures maybe 6 or 7 years ago, so I cannot compare my experience with Mark's. They do rehabilitate faster. Females over 80 years of age have a hard time getting their elbows moving after internal fixation of supra condylar fractures. When you replace their elbows, they do well very fast. It is something that I have done more and more as time has gone by.

**Scott:** I think Jorge brings up an excellent point. I think most studies

show that with a replacement..... patients certainly at 6 months to a year certainly have better range of motion and better pain relief. With that in mind, I am thinking about a patient that I saw that came in 28 years after an elbow replacement with pain. They had fractured their lateral upper condyle and their hinge was completely dissociated. Well fixed ulna and well fixed humerus, and I started looking at the x-rays and thought, "Probably the reason she went 28 years with a well fixed implant is that the hinge probably broke at year 5, 6, or 7 and there was no stress to the implant. Just when she had her upper condyle fracture, she came to see somebody." So, I went ahead and put a new hinge pin in her, and she is doing great at 6 months, but I think to myself, "What if she is going to come in with loose implants at this point?" So, I think one of the key things we need to understand is that when you do a fixation of the fracture and it heals, the motion may not be perfect, but the clock has stopped ticking. Your replacement in this case in my patient.....it took 28 years and then underwent a revision. I think you never escape the clock ticking once you place an arthroplasty and if the patient is always at risk for things going sour even at 28 years.

**Scott:** Is there a difference between a single anterior and two incision repairs of distal biceps rupture? Finally a soft-tissue topic to finish the evening's conversation! Mark, your thoughts on that?

**Mark:** There is not any evidence to my knowledge that there is a difference in outcome between those two approaches to fixing a distal biceps. That said, there are anecdotal accounts of higher incidences of nerve injuries and formation of the heterotopic bone with the two incision repair. My own experience using an anterior incision. I accept that it is not a truly anatomic repair as can be achieved with a two incision approach. I find that my results

*I do see a fair number of elderly people in their 80s and my experience is that total elbow replacement in these patients do better than in rheumatoids. My experience with rheumatoids is that they had a very high complication rate, especially with infection.*

**- Jorge Orbay , MD**

have been very satisfactory, and I think you will hear the same from surgeons who are very skilled with the two incision approach.

**Scott:** And Mark, to digress a little bit, you have done work with John Lubahn looking at the study patients that have not had fixation of the bicep ruptures. Why don't you just make a few comments about those patients and your practice?

**Mark:** The hardest thing is to tell a person who has had an acute rupture that comes into your office a couple days later with pain and a swollen elbow, that they don't have to have surgery. It is very hard for them to imagine that their arm would ever be even close to normal after this fairly dramatic incident. The bottom line is that after..... non-operative treatment, people end up with normal motion. In most instances they do not have pain with activities, although there are some patients who will complain of cramping in the arm with heavier repetitive use. Their loss of strength with regard to elbow flexion is for the most part not noticeable. Their loss of strength with regard to supination is pretty variable. Various articles have quoted loss of supination strength, anywhere from 20 up to 50%.; on average about a

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## Hand Table

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25% loss of supination strength. It does vary from person to person. John Lubahn has a series of laborers who were treated non-operatively. With the exception of one patient, all realized excellent function after non-operative treatment. Clearly, that is not going to be the solution for every person.

**Scott:** Eric, your experience in the military.....what are your thoughts on treating these patients?

**Eric:** Yes, I certainly counsel them on these exact same issues we are talking about. I have had one person.....a little bit older than the most of my patients, who elected not have it repaired. Otherwise, universally everyone wants it repaired, even when you discuss with them the risks and the benefits. I think comparing the one incision versus two incisions..... they both can be done well. They both have their own sets of complications, however, both have minimal complications with good surgical technique. There tends to

be more heterotopic ossification with a two incision technique, but I think a couple articles out of your institution Scott have discussed if you can stay off the ulnar periosteum, this complication can be greatly decreased. Also, both have potential neuropraxias associated with these techniques.

**Scott:** And Jorge in south Florida, what sort of way do you go as far as approach?

**Jorge:** In terms of approach, I prefer the single incision approach. I use a technique in which I put a bone anchor into the tuberosity with two sutures. I take two limbs of each suture and weave them into the biceps. Then, I pull the stump down to the tuberosity by pulling on the other ends. This way I am able to cinch the end of the tendon into the tuberosity. This is all done through a small transverse incision. Many of the distal bicep ruptures that I get are on 40 year old males that are going to the gym and building muscle. Many are taking steroids. To them, their image is important....they would never consider not repairing the biceps....if you avoid soft-tissue injury and minimize heterotypic

ossification, this is a satisfactory procedure.

**Scott:** Well, the most recent study.....actually from a prospective group from Canada looking at 90 patients half.....two incision half single enter incisions..... essentially the same results but slightly higher temporary neuropathic injuries related in the lateral antebrachial cutaneous nerve, but essentially similar results. My feeling is, whatever works in your practice and if you are comfortable and you have good results with a single anterior approach, keep on doing it. If you are comfortable with the two incision approach and it works for you, I think both groups are right. If you are careful handling the soft-tissues, you should get a reasonable result post-operatively. We should keep in mind that Mark Baratz and Mark Lubahn mentioned about how patients do a non-operative approach also. I think that brings us to the end of the questions for discussion.

**Scott:** Thanks everybody for taking time out from your busy schedule to participate in the conference call tonight! Thank you!

## IFSSH Pioneers of Hand Surgery in 2013

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the Section Editor for the *Journal of Orthopaedic Trauma* from 1993-2002. He has been on the Editorial Board of *Orthopedics* since 1986 and has been the Editor of the Trauma Update Section of that periodical since 1989. He has also served on the Editorial Board of the *Yearbook of Hand Surgery, Microsurgery*, as a Consulting Editor for the *Journal of Bone and Joint Surgery* and an International Editor for *Revista de la Sociedad Venezolana de Cirugía de la Mano*. He is an Honorary Member of The Romanian Society for Surgery of the Hand, The Venezuelan Society for Surgery of the Hand, and The Venezuelan Society for Hand Therapy, along with being

a Corresponding Member of The Argentina Society for Surgery of the Hand and The Colombian Society for Surgery of the Hand. Dr. Freeland is also listed among "Guide to America's Top Surgeons" and "Castle Connolly's Guide to America's Top Doctors." Dr. Freeland retired from his clinical practice June 30, 2005 to focus his efforts in the area of research with the department. He was named Physician and Professor Emeritus - Consultant/Researcher for the department in the fall of 2005 and works closely with residents and fellows in regard to research projects

## About the Pioneers

*The enormous contribution of the Pioneers to Hand Surgery will influence many generations of Hand Surgeons to come. Ultimately of course, their accomplishments will benefit countless patients far into the future. The IFSSH Membership therefore, expresses its sincere appreciation and gratitude to our Pioneers for enriching our passion, Hand Surgery.*

*To be nominated as a Pioneer, the person must be at least 70 years of age or deceased, must be a recognized leader in hand surgery and have contributed significantly to the development of Hand Surgery nationally and/or internationally.*



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## AAHS Co-Sponsorship of Educational Programs

The American Association for Hand Surgery Committee is offering co-sponsorship to qualified educational programs in the areas of hand surgery and hand therapy.

Co-sponsorship includes use of the AAHS logo on approved program materials, communications regarding the co-sponsored program to AAHS members (mailing labels and blast email), advertisements in *Hand Surgery Quarterly* and on the Association website, and distribution of co-sponsored program materials through AAHS exhibition at

affiliate meetings.

In order for a course to receive co-sponsorship from the American Association for Hand Surgery, organizations and institutions must complete and submit a co-sponsorship application form and submit to the AAHS Education Committee for review.

Please include a copy of the program brochure and/or a link to the electronic brochure along with submission of the application. Information on AAHS co-sponsorship and the co-sponsorship application form is available at

<http://handsurgery.org/education/co-sponsorship.cgi>.

Materials for co-sponsorship should be submitted to:

**AAHS Education Committee**  
**500 Cummings Center, Ste 4550**  
**Beverly, MA 01915**  
**[contact@handsurgery.org](mailto:contact@handsurgery.org)**

Please promote this opportunity to your hand surgery and hand therapy communities.

# AAHS Job Board

## Hand Surgeon, Minneapolis Park Nicollet Clinic - St. Louis Park

The Orthopedic Department at Park Nicollet Health Services is seeking a fellowship trained hand surgeon to join its collegial practice of 21 surgeons, 4 medical orthopedists, 6 certified physicians assistants, and experienced support staff. Our growing department currently has specialists in sports medicine, shoulder, joint replacement, trauma, pediatrics, and hand surgery. We provide clinic services at several sites in the western Twin Cities. We provide surgical services at two hospitals and two ambulatory surgery centers in the area.

Enjoy the benefits of a large primary care referral base and working in a well respected multispecialty group practice. Call is divided equally among the surgeons. The compensation package is extremely competitive.

We believe outstanding health care is delivered when we merge the science and intellect of medicine with the compassion, spirit and humanity of our hearts. We refer to this as "Head + Heart, Together," and it exists to inspire constant improvement and lasting success. We achieve this by partnering with patients and families in everything from care decisions to service and facility design. As we work together as a unified team, we engage patients, families and the community, and put them at the center of everything we do.

Park Nicollet Health Services, which includes Park Nicollet Clinic and Methodist Hospital, has been repeatedly recognized nationally for quality improvement and care activities. Park Nicollet clinic is one of the largest multispecialty clinics in the United States, with over 700 clinicians providing care in 45 medical/surgical specialties and subspecialties. The Twin Cities are vibrant communities with excellent schools, parks, lakes, theater, professional sports and an international airport.

**Contact:** For immediate consideration, please submit letter of interest



To include your job posting on the AAHS website and in the next issue of Hand Surgery Quarterly, please visit <http://handsurgery.org/jobboard.cgi>

and CV to Missy Fisher, Director of Clinician Recruitment, Park Nicollet Health Services, 3800 Park Nicollet Boulevard, Minneapolis, MN 55416; email: [melissa.fisher@parknicollet.com](mailto:melissa.fisher@parknicollet.com); phone (952) 993-6025. We are proud to be an EEO/AA employer M/F/D/V.

## Plastic and Reconstructive Surgeon Columbus, Ohio

Grant Medical Center, a 645-bed, nationally recognized and growing Level 1 Trauma Center in Columbus, Ohio is seeking additional BC/BE Plastic and Reconstructive Surgeon to join its team of 3 surgeons. Must be trauma focused and have a CAQ in hand surgery. Enjoy the stability of an employed status, along with competitive compensation, potential student loan forgiveness, sign-on bonuses, CME allowances and malpractice tail coverage.

Grant's Trauma Department admits over 4,000 patients annually drawing from a 46 county region and supports an emergency department with an annual census of over 60,000. Verified as a Level 1 Trauma Center since 1991 by the American College of Surgeons, Grant's Trauma Department has been featured on two nationally televised programs: The Learning Channel's "Trauma: Life in the ER" and The Discovery Health Channel's "Critical Hour", in 2001 and 2002. In 2006 and 2005, Grant's Coronary Care Unit and Surgical Intensive Care Unit/Trauma Critical Care Unit each received the Beacon Award for Critical Care Excellence from the American Association of Critical Care Nurses (AACN). Grant also has trained trauma specialists dedicated to trauma in plastics, orthopedics, neurosurgery and vascular surgery. Subspecialty support is provided in ophthalmology, ob/gyn, anesthesia, urology, as well as in-house radiology and interventional radiology. The Department has multi-detector CAT scans

and dedicated ICU/intermediate trauma care/acute care units. Grant's new, \$59 million surgical and heart center includes 18 state-of-the-art surgical suites. Education, research, outreach, injury and substance abuse prevention complement Grant's Trauma services, making it an exceptional program.

Columbus, the capital and largest city in Ohio, ranks at the 15th largest city in the nation. Columbus is home to a business/residential metropolitan area of over one million and boasts a strong and diverse economy. The city of Columbus was recently ranked 25th for the Best Places for Business and Careers by Forbes, June 2011. Columbus is home to over 20 colleges and universities and also has some of the best school systems in the nation.

**Contact:** For more information, please contact Karlie Sites at 614-544-4223, [ksites2@ohiohealth.com](mailto:ksites2@ohiohealth.com).

## Orthopedic Hand Surgeon Indianapolis, Indiana

Franciscan Physician Network (FPN)- Central Indiana, located on the south side of Indianapolis, is seeking an orthopedic hand surgeon to join its growing orthopedic group.

The ideal candidate will be fellowship trained in hand surgery. It is anticipated this will become a 100 percent hand opportunity, but as the practice builds, it may be necessary to do some other orthopedic procedures.

The group has four physicians now with potential to grow to six by the end of 2013.

This is an employed position with FPN, which provides a competitive salary, generous sign-on bonus, full benefits package, retirement options, paid time off, and separate CME days (5) with allowance.

**Contact:**  
[katherine.sinclair@franciscanalliance.org](mailto:katherine.sinclair@franciscanalliance.org)  
317 528-8776  
[www.franciscandocs.org](http://www.franciscandocs.org) (info only)

# 2014

**AAHS ASPN ASRM  
ANNUAL MEETINGS**



**Grand Hyatt Kauai Resort & Spa  
Kauai, Hawaii**

**January 8 – 11     American Association for Hand Surgery**

**January 10 – 12     American Society for Peripheral Nerve**

**January 11 – 14     American Society for Reconstructive Microsurgery**