Report of the Program Chair for the AAHS 34th Annual Meeting, Palm Springs, CA, January 14-17, 2004

The Annual Meeting of the American Association for Hand Surgery (AAHS) was held at the beautiful Westin Mission Hills in Palm Springs, California. We had perfect weather, a great program, great camaraderie, and wonderful opportunities with our families and friends for fun and relaxation. The program had 233 registrants, with 70 scientific paper presentations, 8 poster presentations, and 20 instructional courses. In addition, for the first time we offered 12 excellent computerized instructional courses. Our 46 exhibitors represented the largest number we have had at any meeting.

Hand Therapy Specialty Day was coordinated by Paul Brach MS, PT, CHT. It was an outstanding day with an excellent overview of key challenges facing therapists and hand surgeons. Dr. Sue Michlovitz and Paul Brach reviewed their experiences in Chinle, Arizona, on the Navajo reservation this last year as part of the Vargas International Hand Therapist Teaching Award. It was a very moving presentation that outlined the expanded role that therapists play in the Indian Health Service. Sharon Dest PT, CHT and Paula Galaviz OT, CHT were recipients of the Vargas Award for 2004. Based on the groundwork laid at our Palm Springs meeting, Lynn Bassini MA, OTR, CHT and Dr. Miguel Pirela-Cruz are presently organizing this year’s Vargas trip to Guatemala. The program will include a two-day Central American hand conference at Hotel Santo Domingo in Antigua, Guatemala, August 5-6, and a surgical/therapy team operating August 9-13 in Guatemala City.

Concurrent Panels included the Management of Radial Nerve Palsy, Thumb Carpometacarpal Joint Disease, Computers in Your Practice, Failed Nerve Repair, Nerve Decompression, and a stimulating debate on Clinical Challenges for the Past Presidents of the AASH.

Dr. Susan Mackinnon addressed the landmark advances of her career in her presentation “Merging Science and Multidisciplinary Expertise: Nerve Allograft to Nerve Transfer.” Dr. Elvin Zook gave a stimulating and thought-provoking presentation entitled “Generation-X. Out of Hand?”

Our combined AAHS, American Society for Peripheral Nerve (ASPN), and American Society for Reconstructive Microsurgery (ASRM) day on Saturday, January 17, included the Presidents’ invited lecturer, Dr. John McDonald, who has pioneered many advances in the management of spine-injured continued on page 6
"I Have All The Money I Need"

How much money is enough? To gauge from television and popular magazines, no amount is really enough. People want to be as rich as "the Donald" so badly that they will do or say almost anything, in living color and in prime time, just to have a chance to be his apprentice. I remember an article once, in *New York* magazine (Thy Neighbor's Budget, by David Kirkpatrick, *New York*, 8/7/2000), which discussed the personal finances of people whose incomes ranged from $25,000 per year up to $10,000,000 per year. A common thread ran through all the interviews: 'I can get by OK on what I'm making, but if I only had a little more, THEN I would be living on Easy Street!' Of course, the $25,000 earner thought that her life would be complete if only she could afford a few meals in restaurants, while the $10,000,000 man longed for his own private jet, but at every level in between it was the same: I am OK, but....

The article goes on to quote an economist, whose research has shown that it is not absolute income, but relative income, that matters most, when people are asked if they are satisfied with their income. At one medical institution with which I am familiar, everyone draws a salary, which is specialty specific. There had been a pecking order to the specialties that was stable for years. Recently, a new specialty moved from the middle of the pack to the top. Suddenly, the compensation that had been perfectly acceptable to the former top specialists no longer was. Their income had not gone down; it bought the same amount as it had the year before. But it was no longer the biggest pay, so somehow that meant in the eyes of those specialists that the value of their specialty, and therefore themselves, had dropped.

Of course, while most people gauge their own worth by looking around them, and seeing what others have, some are guided by an inner compass. Which brings me (finally!) to the title of this article. A few years ago, I was at a dinner party with friends. I was not the host, so some of the guests were new to me. One of them, I’ll call him Gary, was a real go-getter. He had at least a half dozen business ventures in process. He was always looking for new opportunities to turn a profit. He spent much of the evening talking about his businesses, how much he made, and the opportunities there were for the other dinner guests to invest with him, and share the wealth. As he went around the table with his pitch, he got to a person I’ll call Steven. “C’mon Steven”, he said. “Everyone can use a little more money!”

I still remember what happened next as clearly as if it had been yesterday. “Nope”, Steven said. “Not me. I have all the money I need.”

“You DO?” said Gary, clearly flabbergasted. “I didn’t know you were doing so well!” The conversation quickly turned to other topics.

Of course, Steven was not any better off financially than Gary. In fact, it is quite probable that Steven’s income was considerably smaller than Gary’s. But, unlike Gary, Steven knew what he needed, and knew that he had it, and that was enough for him. Mostly, what Steven needed was a muskie on his fishing line, good friends, good health, and a loving family. He had a warm, comfortable home. He didn’t need a mansion, or a second place in Vail, or New York, or London. He had a perfectly serviceable minivan, and felt no need to trade up, or to own multiple vehicles when he could only drive one at a time anyway. Steven spent most of his time mostly with his family, or fishing, while Gary seemed to be looking for a competitive edge.

I was reminded of all this recently when Steven told me that his friend Gary had passed away. I didn’t ask, but I wondered whether Gary, Steven knew what he needed, and that was enough for him. Mostly, what Steven needed was a muskie on his fishing line, good friends, good health, and a loving family. He had a warm, comfortable home. He didn’t need a mansion, or a second place in Vail, or New York, or London. He had a perfectly serviceable minivan, and felt no need to trade up, or to own multiple vehicles when he could only drive one at a time anyway. Steven spent most of his time mostly with his family, or fishing, while Gary seemed to be looking for a competitive edge.

I was reminded of all this recently when Steven told me that his friend Gary had passed away. I didn’t ask, but I wondered whether Gary, Steven knew what he needed, and that was enough for him. Mostly, what Steven needed was a muskie on his fishing line, good friends, good health, and a loving family. He had a warm, comfortable home. He didn’t need a mansion, or a second place in Vail, or New York, or London. He had a perfectly serviceable minivan, and felt no need to trade up, or to own multiple vehicles when he could only drive one at a time anyway. Steven spent most of his time mostly with his family, or fishing, while Gary seemed to be looking for a competitive edge. I was reminded of all this recently when Steven told me that his friend Gary had passed away. I didn’t ask, but I wondered whether Gary, Steven knew what he needed, and that was enough for him. Mostly, what Steven needed was a muskie on his fishing line, good friends, good health, and a loving family. He had a warm, comfortable home. He didn’t need a mansion, or a second place in Vail, or New York, or London. He had a perfectly serviceable minivan, and felt no need to trade up, or to own multiple vehicles when he could only drive one at a time anyway. Steven spent most of his time mostly with his family, or fishing, while Gary seemed to be looking for a competitive edge.
Challenge in 2004: Core Competencies for AAHS

Since my introduction to the American Association for Hand Surgery, I have developed a deep respect for its mission and its unique and positive traditions. This organization is composed of good, good people from a variety of training backgrounds. The very constitution of this organization celebrates those differences to foster a rich environment for exchange of ideas, techniques, and friendships. I have gained so much insight and advice from all of our previous leaders and continue to do so. In particular, I would like to acknowledge the perspectives that close proximity and friendship can bring, my partners at the Mayo Clinic, Past Presidents Drs. Robert Beckenbaugh and Peter Amadio. Our previous leadership has been exemplary, and the mentorship offered by those individuals has been invaluable, and still is to this day. In particular, the close partnership I have developed with our immediate Past President, Dr. Allen Van Beek, will always be with me. Dr. Van Beek did an outstanding job as President and adhered to the Mission Statement while introducing numerous innovative initiatives. The annual meeting in Palm Springs that Dr. Van Beek and Dr. Warren Schubert assembled was one of the best ever, and they and their program committee are to be soundly congratulated. Critical to the success of the annual meeting and the daily work of managing this organization is our Central Office staff. I have known Laura Downes Leeper since I was first introduced to the AAHS, and I cannot think of anyone who could have been more helpful and supportive through Central Office activities. Through my years on the Board of Directors, I have had the pleasure of working with so many gifted, friendly and dedicated friends and colleagues, which as you might expect with this organization, is a direct reflection of the membership.

Article II of our Bylaws states “The purpose of the American Association for Hand Surgery shall be to foster and promote the highest quality of hand care through the development and sponsorship of educational programs related to the hand and upper extremity, through communications with health care professionals and the public, and through the endowment of research.” That just about says it all. That is what we are all about. That is our mission. We have gone far in reaching these mission goals and it is our charge to continue these efforts. Having just completed an ACGME accreditation renewal site visit, I have become acutely aware of the concept of “core competencies” as they relate to Hand Surgery Fellowship training, I believe we can apply the “core competency” concept to organizations, as well, and derive those competencies from the principles defining the Mission Statement.

The first group of competencies could be under the heading of “Service to our Members” and would include Education, Communication and Fiscal Responsibility. Our educational commitments are strong, and include the annual meeting and associated educational venues, and our commitment to an annual free-standing CME course. This year, the AAHS and the American Society for Surgery of the Hand (ASSH) are once again co-sponsoring the Work Related Upper Extremity Disorders Course, May 21-23, 2004, in Chicago. The AAHS is also co-sponsoring, with the Romanian Society for Surgery of the Hand, the Post-IFSSH Congress to be held in Bucharest, Romania, June 19-21, 2004. Beginning in 2005, the AAHS will assume a role in co-sponsoring, with the ASSH, the Specialty Day program on upper extremity problems at the annual meeting of the American Academy of Orthopaedic Surgeons.

A number of surgeon members have asked for assistance in preparing for board recertification examinations, and we have responded by committing to develop a series of instructional courses at our annual meetings that will integrate review topics on a cyclic basis over multiple annual meetings. We will continue to communicate through a variety of means, including the very well-respected Hand Surgery
FROM THE PRESIDENT

continued from page 3

Quarterly publication as well as our website. We are looking for new means of communication, such as a development of a peer review journal as an Association organ.

All of these efforts must be carried out in a responsible manner in order to insure the fiscal soundness that is necessary for our mission to be carried forth through future generations of hand care professionals. We are in great shape financially and growing, thanks to the watchful eye of our Treasurer, Dr. N. Bradley Meland, and adherence to an investment policy adopted by the Board of Directors three years ago. We will strive to bring new members into our organization at all levels of membership in order to insure vitality in the AAHS for future generations. We will continue to actively promote and support the Hand Surgery Endowment, for its mission for supporting educational opportunities, research projects and awards truly enriches the existence of the AAHS. We will also strive to make this a record-setting year for new member recruitment at all levels.

Taking the core competency concept one step further, the second level could concentrate on service to our community. “Our community” can be defined as the community of hand care professionals, both within our organization and without, as well as the public community that we serve. We will continue to work with our health care partners in a cooperative fashion, particularly the ASHT, ASRM, ASPN and the ASSH. The challenges we face in health care are bigger than any of us can imagine, and we cannot face them successfully alone. It behooves all of us to link arms with our partners and work on these issues together, while still maintaining the dignity and identity that our great organization deserves. We are preparing a series of public service announcements for the public related to season upper extremity injuries. Our website has matured to a truly effective, efficient and aesthetic status, thanks to the tireless efforts of Dr. Keith Brandt. Not only are we witnessing an increase in usage from our members, but the public is hitting the site at an ever increasing pace. We will continue to encourage this by developing resources helpful to the public and to connect the inquiring public with clinical questions to interested members.

The ultimate level of service to community may be considered to be volunteer efforts to provide hand and upper extremity care to underserved populations in need. The AAHS and Hand Surgery Endowment have been doing this through the Vargas Award program for years. It is a proud tradition that celebrates the professional relationships of therapists and surgeons, and we pledge to continue this effort. Additionally, we are going to begin to actively encourage our members to serve our community through volunteerism by short tenures at the Chinle Comprehensive Health Care Facility serving the Navajo Nation in Chinle, Arizona. Dr. Brian Adams is coordinating these efforts, and explains the structure of this program in more detail in the article above.

Our “to do” list seems full enough as it is, but we cannot forget about the culmination of the year at the annual meeting of the American Association for Hand Surgery at the Sanibel Harbor Resort and Spa on the beautiful central gulf coast of the Florida peninsula, January 12-15, 2005. It will be again held in conjunction with the annual meetings of the American Society for Reconstructive Microsurgery and the American Society for Peripheral Nerve. Dr. Scott Kozin is our Program Chair. The preliminary program looks exciting already and we look forward to seeing all of you there. In the meantime, I challenge each and every member of the AAHS to get involved at some level. This is our organization and only we can make it work. Together, we truly can make a difference.

—Brian Adams MD

Hand Surgery Care for the Navajo Nation in Chinle, Arizona

Want to apply your knowledge and skills in hand surgery over a long weekend to help patients who don’t have easy access to hand care without traveling to a third world country? Interested in exploring some of the most beautiful canyons in America without planning an entire vacation?

The Hand Clinic and Rehabilitation Unit at the Chinle Comprehensive Health Care Facility (http://www.lapahie.com/Chinle.cfm) is part of the Indian Health Service that serves the Navajo Nation. The facility is located in Chinle, Arizona, which is adjacent to beautiful and unmatched Canyon de Chelly that offers incredible vistas and hikes. The hand clinic is staffed by an outstanding group of therapists, nurses, and support staff. It is a new facility that offers most of the comforts, services and technologies of your own hospital. You are treated with the utmost respect and receive enormous gratitude for your help in providing care. My time spent last year was enjoyable in every way, including the outpatient care, operative experience, and off-time exploring the local canyons. I plan to return this year and again for years in the future. You won’t find a more rewarding way to spend a long weekend.

If you’re interested in volunteering, please contact the AAHS Central Office as soon as possible as your help is greatly needed in the near future.

—Brian Adams MD
N. Bradly Meland, MD has been an active member of the American Association of Hand Surgery since his first meeting and acceptance into membership in Toronto in 1989. He was led to the organization by his partners at the Mayo Clinic in Rochester, MN. Dr. Meland feels very fortunate to be a participating member in this great organization and is exceedingly grateful to the leaders he has worked with and learned from over the past 15 years.

Brad was born in 1953 in Northwood, North Dakota, a town of 1200 people. He attended the University of North Dakota where he graduated in 1975 with a degree in natural sciences and Latin. He was then accepted to the University of North Dakota School of Medicine, graduating in 1979 with his MD degree.

He matched in a general surgery program at Saginaw Cooperative Hospitals in Saginaw, MI, an affiliate of Michigan State University. He then went to the Mayo Clinic in Rochester, MN, and completed two years of plastic surgery training under the direction of Ian Jackson, Jack Fisher, John Woods, P. G. Arnold and George Irons. It was during that time that he developed his interest in upper extremity and microsurgery, rotating on the orthopedic service. He spent six months doing orthopedic microsurgery training with Mike Wood and Bill Cooney in Rochester, and then finished his hand surgery training at the University of South Florida in Tampa under the guidance of Bob Belsole, Tom Green, John Rayhack and Ellen Beatty. He then returned to Rochester Mayo Clinic on staff in 1987. He maintained an active hand and microsurgery practice at the Mayo Clinic in Rochester, MN, from 1987–1993. During that time, he was the Program Director of the Plastic Surgery Residency and their associated fellowships. In 1993 he transferred to the Mayo Clinic Scottsdale to replace Dr. Irons in his retirement. From 1993-1998, he was the Chief of the Division of Hand Surgery at Mayo Clinic Scottsdale. He was fortunate during his years at the Mayo Clinic to be active in clinical and basic science research, publishing over 70 scientific articles primarily related to plastic surgery, microsurgical reconstruction and hand surgery. He has also written 15 book chapters and numerous abstracts and reviews. He has been guest professor in both microsurgery and hand surgery at several institutions in the United States, Europe and Canada.

In 1998 he left the Mayo Clinic to pursue private practice. Since 1998 he has been sole proprietor in his hand and plastic surgery private practice in Scottsdale, AZ, doing all aspects of plastic surgery and upper extremity hand surgery. At the time of leaving Mayo Clinic, he was an Associate Professor of Plastic Surgery and Orthopedic Hand Surgery.

Despite his busy clinical practice, he maintains a busy family life. He has been married to his wife, Sue, for 25 years. She is a physical therapist working in sports medicine/physical therapy for Nova Care. He has four daughters, Angela, Shaina, Jessica and Tessa.

Dr. Meland has been very active in the AAHS since becoming a member. He started his service in 1993 where he was the ASPS representative of socioeconomic committee for two years. He was chairman for two years on each of several committees: commercial exhibits, program, time and place, membership (streamlining the application procedures and moving it online) and the resident/fellows awards contest. He served as program chair on the hand section at the ASPS annual meeting for the association. He has been a director at large and is currently entering his last of three years serving as treasurer for the AAHS.

His greatest blessing has been the friends he has made throughout his involvement in the association. He is specifically pleased with our affiliation with the therapists in this group.
patients such as Christopher Reeves.

Dr. Miguel Saldana reported on the progress being made by the AAHS Endowment, and many individuals made contributions at our meeting. Contributions are still welcome! (The Hand Surgery Endowment, 6222 South Major Avenue, Chicago, IL 60638, www.handsurgery.org)

We were honored to have Dr. Roy Meals, president of the American Society for Surgery of the Hand (ASSH) who was able to address our group, and welcome our members to attend the ASSH meeting in New York, September 8-11, 2004 (www.hand-surg.org).

Dr. Zsolt Szabo represented the International Federation of Societies for Surgery of the Hand (IFSSH) meeting planned in Budapest, Hungary, June 13-17, 2004, and welcomed the participation of our membership (www.ifssh2004.com).

Dr. Alexandru Georgescu, representing the Romanian Society for Surgery of the Hand and the Romanian Society for Reconstructive Microsurgery, also welcomed our members to attend their post-IFSSH congress in Bucharest, Romania, June 19-21 (www.postifssh2004.ro). A special journey through the countryside of Hungary and Rumania is planned between these two meetings.

Our new project of computerized courses was coordinated by our Technology Chair, Dr. George Landis. This is likely to be the ‘kick off’ of a whole new part of our AASH educational program. In addition, George was able to coordinate a presentation on digitizing home movies for families.

Special thanks to our president Dr. Allen Van Beek for allowing me to serve as Program Chair, to the 19 members of the Program Committee and to Paul Brach and George Landis. I would like to thank our international guests, Dr. Szabo and Dr. Georgescu, for making the long trip to recruit us to participate at the Budapest and Bucharest meetings. Special thanks to Laura Downes Leeper and Celeste Martinez from our Central Office. Thanks also to George Balfour, Exhibits Chair; Craig Johnson, Chair of the Resident and Fellow Awards Committee; and for help and advice from William Geissler, previous AAHS Program Chair. Special thanks to the 56 members who worked to put together excellent instructional courses, our 32 panelists, and our eleven members who put together 12 computerized courses.

I look forward to seeing you all next year at the Sanibel Harbor Resort, Sanibel Island, Florida January 12-15, 2005. Richard Berger and Scott Kozin promise to have an exemplary program (www.handsurgery.org)!

For those of you have not attended ASPN or ASRM meetings (www.asrm.org), 2005 will be a great year and a great venue to attend those meetings as well!

Warren Schubert, MD, FACS
2004 AAHS Scientific Program Chair
Did You See That?

The annual AAHS meeting is inclusive and the coordinated educational and leadership activities of ASHT, ASRM and ASPN have established a powerful educational coalition. Each year this combination becomes increasingly important to professionals interested in hand and reconstructive surgery. Over and over the “did you see that?” comment was heard; the meetings have become the home of innovation, creativity, professional satisfaction, excitement and essential information.

This year’s faculty of panelists, instructional course chairs, and scientific session presenters brought new horizons to the meeting. The variety of topics was daunting. And it is especially exciting to see residents presenting their papers and hearing genuine spontaneous floor discussion during the scientific program sessions! Truly exciting, and where else does this occur?

It is nearly a lost venue except at our annual meeting!

For those of you participating in the blues harp lessons make sure you keep on practicing! Bring your harmonica next year and perhaps Hand Harp Surgeons Band of Mark. Dr. Mark Baratz, thanks for the fun moment and do you think if everyone practices we will be ready for a recording session next year?

The first ever designated Joseph Danyo Keynote speakers Dr. Elvin Zook and Dr. Susan MacKinnon brought the topics of manpower, practice philosophy and the process of peripheral nerve advancement into perfect harmony. Another annual meeting Educational Highlight was the establishment of computerized instructional courses. Nine courses were available for attendees to review. Each computerized IC station had extensive use by individual viewers.

If education is important, so is maintenance of our professional esprit de corp. The Pete Dye designed golf course was a beautiful setting for the annual meeting. The 16th hole of the golf course became a special challenge to those enjoying the day at the links golf venue. Dr. Miguel Saldana and Dr. Van Beek were able to raise over $1,000 on that benefit hole for the Hand Surgery Endowment because of the generosity and challenge to the foursomes enjoying the course on a beautiful desert afternoon. Congratulations to the foursome: Dr. William Swartz (AAHS 1999 president), Dr. Lawrence Colon, Dr. Jeffrey Friedman and Dr. David Drake for accumulating the best score (-6). Next year that foursome will have to be reassigned!

Visits by Dr Jim Wells, president of the American Society of Plastic Surgeons and Dr. Roy Meals, president of the ASSH, along with updates from those organizations kept members abreast of cooperative efforts for member advocacy and educational efforts between organizations.

Everyone enjoyed the Gala event sponsored by ASRM celebrating their 25th birthday. Dr. Berish Strauch’s review of their organization’s birth made many realize that time does change things personally and professionally. Dr. Scott Levin’s historical review was a multimedia masterpiece. Thanks to Scott and Berish.

The cooperation in the meeting format of AAHS, ASHT, ASRM and ASPN continues to mature and the symbiosis created at the meeting is palpable. The meeting format is not continued on page 8
only the cutting edge of hand and reconstructive surgery but also the cutting edge of the future formats of meeting. Cooperative informational sessions, conjoined scientific program, conjoined social venues, excellence in education combined with rejuvenation of our enthusiasm and esprit de corps for our profession. Special thanks to ASRM President Ronald Zuker, MD, ASHT President Mr. Paul Brach, and ASPN President Dr. Keith Brandt for their leadership, cooperation and help in making the annual meeting successful.

Special thanks to program Chairperson Warren Schubert, and the program committee for advancing the AAHS annual meeting to a new level sophistication. Their ability to work with program committees of ASRM and ASPN assured that the emerging technologies and techniques were presented and that the annual gathering continued to be the meeting to attend if you wanted to educate your mind and rejuvenate your professional spirit. The AAHS board of directors met during the annual meeting and covers off perplexing problems and challenge each of us with an increase in amplitude of teaching and fun at our annual meeting. Save the dates January 12-18, 2005 for the combined AAHS, ASHT, ASRM, and ASPN and be part of the best of the best in hand surgery.

Allen Van Beek MD
AAHS Immediate Past President

The American Association for Hand Surgery would like to thank the following sponsors:

Avanta
Micrins
Music Theme Perfectly Pitched at Hand Therapy Specialty Day

The beautiful city of Palm Springs, California, home to such celebrities and Presidents as Bing Crosby, Dinah Shore, Bob Hope, Henry Truman, and Dwight Eisenhower, was home, if only for a short time, to this year’s AAHS annual winter meeting.

The theme of this year’s opening day was Hand Therapy Through the Ages, co-chaired by myself and Warren Schubert MD. The morning session, which was moderated by Sue Michlovitz PT, PhD, CHT included interactive discussions between surgeons and therapists on topics dealing with fracture, soft tissue and nerve injury on a continuum from the early years to the later years.

The early session ended on a “blues note” when Mark Baratz MD ascended to the podium and gave an unbelievable harp solo to start his presentation on the history of the harmonica in blues music. After passing out more than 60 harmonica’s (unfortunately there were not enough to go around), or “harps” to the people in the biz, the audience was on the edge of their seats to learn the intricacies of this soulful instrument. Dr. Baratz was the leader of the band. Believe me, there were no American Idol harmonica players in the room on this day. However, in the end, after Dr. Baratz’s simplified demonstration and teaching tips, everyone (well, at least everyone) was able to carry a tune with this diminutive instrument. Words simply cannot describe the enjoyment that was had by all in the ballroom that morning.

The afternoon session, which was moderated by Keith Bengtson MD, continued the musical theme started at the end of the morning session by discussing the Performing Artist: Then vs Now. Many thanks go to Peter Amadio MD and Lauren Valdata-Eddington PT, CHT for putting together an afternoon session that stimulated everyone’s interest in the area of the performing artist and how to manage what can be a very difficult population.

The day ended with 2003 Vargas Award winners Sue Michlovitz PT, PhD, CHT and I giving our presentation on the experiences we both had at Chinle Hospital on the Navajo Indian Reservation in Chinle, Arizona, along with Brian Adams MD and Lee Osterman MD. Paul LaStayo PT, PhD, CHT must be praised again on organizing an experience that Sue and I will not soon forget. Anda Battocchio PT needs to be recognized as well for her tireless efforts in scheduling the patients for clinic, coordinating education sessions for the local therapists and surgeons, and lastly, for being such a wonderful travel guide for Sue, Lee, Brian and myself.

Cheers go out to Sharon Durst OTR/L and Paula Galaviz OTR/L, CHT, who were named the 2004 Vargas Traveling Fellows. They will be traveling to Guatemala for two weeks this summer.

The Board of Directors, outgoing AAHS President Allen Van Beek, MD and Program Chair Warren Schubert MD should be commended for creating such a wonderful scientific program this year. As the outgoing Senior Affiliate Director, it was a privilege to have served alongside these fine individuals.
I thought that I would update all of you on the status of our Hand Surgery Endowment (HSE). The Board of Directors hired Smith Barney in March 2002. Prior to that time the HSE assets were vested in several mutual funds. When these funds were analyzed by experts at Smith Barney, it was noted that on Risk/Return Analysis these mutual funds were on a high risk tract. Some of them were high risk and low return also.

Invesco-National Asset Management was hired to manage the account at Smith Barney. The style of the account is Large Cap Core Treasury Balanced. The Board of Directors dictated to the Invesco-National Asset Management for the style of the HSE account to be conservative with the primary goal being Principal Preservation followed by Capital Appreciation.

Dr. Robert Schenck, HSE’s first president and founder, managed to increase the assets to $226,760.00. His goal was to eventually increase the assets of HSE to $1,000,000.00. Once that lofty goal is reached, the HSE would be able to support twenty times the educational goals that the HSE supports now.

In 1996, at the inception of the HSE, 35 AAHS members supported the embryonic HSE. During the early phase there was a vigorous growth phase with tremendous support from our members (see chart below). Over the last two years, our members seem less inclined to continue the early stellar support to the HSE.

What ever the reasons for this decline, it is important for you to know that the HSE assets have grown from $226,760.00 in June 2002 to $282,000.00 by December 31st of 2003.

This year at the 34th Annual AAHS meeting your HSE supported two Vargas Award Recipients, Paula Galaviz, MS, ORT, CHT and Sharon Dest, PT, CHT with $1,500.00 for their trip to Venezuela later on this year. The HSE was ready to support a $500.00 “Best Therapist Paper” and a $250.00 “Best Poster Award,” but unfortunately these winners were not identified to the HSE. That money was returned to the HSE.

At the Palm Spring meeting Dr. Mark Baratz’s “harmonica session” to the general meeting promulgated a sale of his CD that generated $205.00 for the HSE. My sincere thanks for his generosity.

During the golf outing, your attempts at a “hole in one” at the 16th par 3 added $1,200.00 to the HSE. My hardy thanks to all of you who generously supported that particular effort.

Remember that the best time to donate to the HSE is during the payment of the yearly dues. Obvious on that form is an HSE donation box for $150.00 dollars that can be checked. If every one of the AAHS members donated $150.00 for four years in a row, we would achieve the $1,000,000.00 mark!

Setting an example with substantial donations from the AAHS Board of Directors were Drs. Allen Van Beek, Susan McKinnon and Alan Freeland. Their leadership by example is kindly appreciated.

AAHS members who moved into the Topaz Lever ($1,000.00) during 2003 were the following:

- Mark Baratz
- Lawrence Cervino
- James Clayton
- Robert Gardere
- Frederick Heckler
- David Hildreth
- Ronald Joseph
- John Lang
- W. R. McArthur
- Hiram B. Morgan
- Somprasong Songcharoen
- Eric Wyble

The Board of Governors for the HSE, Drs. Joseph J. Danyo, N. Bradley Meland, William Swartz, Robert Walton and myself, kindly thank all of you who have generously supported the Endowment efforts this past year.
Hand Problems of the Performing Artist

At the recently concluded 2004 Annual Meeting, the Hand Therapy Specialty Day included a panel to discuss the hand problems encountered by musicians. We have asked the same experts to once again share their insights and treatment approaches in this Around the Hand Table. Moderator Keith Bengtson MD, Director of Hand Rehabilitation, Mayo Clinic, Rochester, MN, is joined by surgeons Peter Amadio MD, Professor of Orthopedic Surgery, Mayo Clinic College of Medicine, Rochester, MN, and Mark Baratz MD, Allegheny General Hospital, Pittsburgh, PA, and hand therapist Lauren Valdata-Eddington PT, CHT, Baltimore, MD.

Dr. Bengtson: The record of hand problems in musicians dates back to the time of Robert Shuman. However, it wasn’t until the last 20 years or so that problems have received more attention. In fact, the first medical problems of musician’s conference were held as recently as 1983. First of all, Dr. Amadio, perhaps you could discuss how you approach the history taking of a musician that comes into your office?

Dr. Amadio: If I have a musician who’s coming in, particularly if it’s a performance related problem, as opposed to, for example, a colles fracture or something like that, I think it’s important to spend a fair amount of time taking a history. Specifically, everyone has a life that is varied and includes a lot of components—their family, their work, and so forth. Particularly in musicians, the relationship between a person and the music that they do for either a job or a significant hobby is really exaggerated. I think it’s very, very important to try to piece that relationship together and try to find out exactly how important the musical performance is to the person as well as what the symptoms are that bring the musician to you. It’s very, very important to sort those issues and to go back as far as you can in the history to when they weren’t symptomatic and then come forward to the present, with particular attention to the details of any changes in technique, practice habits, repertoire, how often they’re practicing, how often they’re performing. Also, whether they changed from solo to ensemble or the kind of ensemble, or even the room in which they’re playing, whether the temperature changed or the seating changed. There are a variety of things you really have to take into consideration, really the entire environment of the musician, if you’re going to try to sort out what exactly is the source of the problem. Today in the office, I saw two musicians where these issues weren’t as relevant. One came in with carpal tunnel syndrome that was performance related but it was a very straightforward diagnosis and evaluation: it was an older person, who had rheumatoid arthritis in addition to being a musician. Another was a pianist who had a locked trigger thumb that actually came from a new hobby of throwing clay pots. So sometimes it’s not as important and it’s much more straightforward to make a diagnosis and evaluate. But often you’re going to have a musician that comes in with a less specific complaint, and then I think it’s very, very important to dissect out the history, as I’ve described.

Dr. Bengtson: Dr. Baratz, perhaps you’d like to mention how you examine a patient who is a musician that comes in to see you.

Dr. Baratz: I think that it’s not much different from dealing with any other person who has a specific complaint or problem. You want to be thorough and if it is for example, something that is suggestive of a nerve problem, you’ve got to do a complete exam starting from plexus down to the fingertips. I think that one of the things that I have found helpful that’s been talked about for a long time in care of the musician is to have them bring their instrument to the office. Sometimes that’s easy to do, sometimes it isn’t. But for someone like a flautist who has trouble with the small finger you can get a sense for how far they have to reach. I had a young girl who was a cellist who was having symptoms consistent with thoracic outlet syndrome and it was clear after moving from a 3/4 size cello to a full size cello that she was putting her arm into the provocative position for thoracic outlet syndrome. The use of the instrument is probably the one thing that is different in my examination from the non-musicians.

Dr. Bengtson: Ms. Valdata-Eddington, perhaps you can say something about the therapist approach to evaluating musicians?

Ms. Valdata-Eddington: Initially, I wouldn’t typically look at the involved area. I would probably start with a full body evaluation of

continued on page 12
various postural checkouts. I ask what they do outside of playing their musical instruments, since a majority of my patients are in high-school or college. These students are dealing with their school work and not doing any physical activities to keep up their strength and endurance. Typically, they are very weak yet they are playing their instruments many hours using small muscles. I usually do a quick postural evaluation including axial extension, pelvic tilt, lumbar and hip flexors, and flexibility. Usually they have weak abdominal and gluteal muscles. I then look at their injured part to see how that would relate or assimilate with their instrument. I don’t typically evaluate them with their instrument on their first exam. Since I’m going to be seeing them more frequently than their physician and for a longer period of time, I like to initially concentrate on their full body.

I’m usually given a specific diagnosis. For example, in a cellist with impingement, I want to look at his range of motion, check his grip and pinch and see if there are any thoracic outlet problems. Next, check for particular areas of pain whether it be trigger points, acupuncture points, or just total muscle spasm. In addition, when I’m doing that evaluation, I want to look at their standing and sitting posture. Since the person is usually playing in an asymmetrical position, I want to see their muscle flexibility and see the muscles that are either elongated or weak or the muscles that are shortened and in spasm. From there I would probably check the different muscles for pain and spasm, such as is found in flexor tendonitis and extensor lateral epicondylitis. I would delay a muscle test at that point because they’re usually in acute pain and it would not be indicated.

Finally, since we have the advantage of a full time social worker who is a hand and upper extremity specialist, she can help them deal with relaxation, whether it is from stage fright to pure relaxation for the patient and their muscles. Most people don’t relax because they are constantly on the go, dealing with their schoolwork as well as with the tension caused by not being able to play their instrument for their classes or recitals. So she’s usually consulted during the time frame of my initial history and beginning of treatment.

**Dr. Bengston:** You mentioned return to play.

**Ms. Valdata-Eddington:** Yes.

**Dr. Bengston:** When is it appropriate to have a patient actually play their instrument or return to playing their instrument when they have an injury?

**Ms. Valdata-Eddington:** Again, most of the people I am treating have music as their life. Since most of my patients are anywhere from college freshman to Master students, without their instrument they don’t have school. One of the main things that I have tried is to utilize Dr. Richard Norris’ book, *Return to Play*, Chapter 14. Many of his theories are similar to mine. I will try to get the musician playing as soon as they can shadow play and hold their instrument without pain. If they’re presenting with Dr. HJH Frye’s category five (having pain everywhere with all activities causing pain), it takes a good while for them to reduce their symptoms. That person would not return to play at that moment; instead I have them delegate their time mentally so they’re actually mentally playing. Since that’s not going to help their situation, I get them to mentally play their pieces. They actually need to delegate anywhere from a half hour to an hour looking at their piece, thinking about their instrument, doing visualization, and play the different piece that they may have been working on.
and/or other pieces that are more simple. This is done prior to “shadow playing”. As their pain is reduced and they’re able to rate their pain, on the pain scale, from a zero to a three, I then start them playing again. I had a cellist who had an impingement syndrome due to changing his instrument from the two that he had played for many, many years to one that was a little larger, but with a different bridge angle. Due to his body type and posture, he had significant impingement problems. He actually started to return to play three weeks into hand and upper extremity treatment because we wanted to get him doing the mental play immediately. After three weeks he was able to play twice a day for three minutes with a twenty-minute break, then another three minutes. To have this patient progress from the mental play to shadow play without the instrument, to shadow play holding the instrument in the proper position (because of cell memory he would just revert back into the bad positions), then to the three minutes, was an excellent accomplishment. That’s the progression—mental, shadow without, shadow with the instrument: holding it but not playing anything. I would have him doing some types of active activities that would improve finger motion to simulate chord position or to just continue playing and building up his time in the shadow zone without the instrument. Then I have him move over to holding an instrument and not do scales, but just move his fingers along the chord hand (left), and then the bow hand (right). He may be able to hold the bow anywhere from one to three minutes. If he can do that with no problem as time goes on, then have him actually put it onto the instrument.

**Dr. Bengtson:** What if there’s a surgical problem? Perhaps if you see a patient that has something straight forward surgical, like carpal tunnel syndrome, do either the surgeons in the group here treat the patient any differently because they’re a musician?

**Dr. Amadio:** I treat them basically the same. I do an open carpal tunnel release. I think the big thing is to make the right diagnosis and to provide a treatment that you’re confident will address the particular problem, and then move on with an aggressive rehabilitation. I make a small incision at the base of the palm. Often I will cross into the distal forearm a little bit, all under local anesthesia. After I release the flexor retinaculum, I ask the patient to make a tight fist with the wrist in neutral position. If in that position the flexor tendons hop up over the hook of the hamate, which sometimes they do, I reconstruct the flexor retinaculum. Again, I do this in everybody, not just in musicians. The reason I do that is because I think that that subluxation of the flexor tendons over the hook of the hamate can be a source of pain. If I need to reconstruct the retinaculum, I use a radially based rotation flap of the flexor retinaculum, so you lengthen the flexor retinaculum as you close it. I begin finger motion the day of surgery, wrist motion the next day with a splint to protect the wrist in between exercise, and I encourage the patients not to posture the wrist in flexion, especially if the flexion retinaculum has not been repaired. I usually also close the palmar fascia before I close the skin. Usually within about two weeks they can start getting back to some activities, including musical activities if it’s a musician.

**Dr. Baratz:** I think that the most important point today is the need to make the correct diagnosis. There’s nothing worse than dealing with any patient, musician or otherwise, who has had a failed carpal tunnel surgery because they had surgery for hand pain rather than numbness in a median nerve distribution.

For everyone, including a professional musician, professional athlete or my next-door neighbor, I continued on page 14
do a limited open carpal tunnel release and I encourage them to use their hand right away. I don’t splint them; I have them wear an ACE bandage for one week.

I like the concept of graded return to activities for musicians and for the pianist in particular. I’ve had good luck having them work initially on a keyboard instead of a piano. The action on the keyboard is a little bit lighter and a little bit easier on the hand. The one person that I slow down is the right-handed string player who has carpal tunnel surgery done on their left hand, or the guitarist who has to play with a lot of wrist flexion. I usually ask them to wait two weeks before they play using the left hand. If it’s someone who is a classical guitarist, I’ll have them use a guitar that has lighter action, like an electric guitar, where they don’t have to put as much flexion into their wrist and don’t have to put as much pressure on their fingers.

**Dr. Bengtson:** Ms. Valdata-Eddington, you must have some experience with postoperative rehabilitation.

**Ms. Valdata-Eddington:** Yes. Unfortunately most of the people that do well we don’t see. I’m typically seeing people that are having pain problems. But on an average I’d say we see 3% of carpal tunnel patients. If someone walks in with pain, my goal is to immediately decrease the pain, decrease the swelling, and increase pain-free range of motion. If I started working on the person within the first couple of days, I would definitely use a treatment to decrease pain and swelling, such as a (TENS) unit. Even more effectively, I’ve been using the JACE unit which is a high frequency galvanic electrical stimulation and/or interferential treatment. It’s a little more comfortable than the TENS unit.

Depending upon the person and their wound, I would not initially do ultrasound even though it’s good for reducing scars. I would do ultrasound if there was a lot of scarring over the wrist. I would start gentle friction massage, and a deeper massage for the scar tissue to try to mobilize it. In addition, I would do and also teach the patient to do a light fluid flushing massage, not the retrograde massage which is too heavy. I also use manual edema mobilization techniques to help reduce swelling.

Using an edema reducing glove that has a very gentle amount of pressure would be appropriate for night and day wear. Home massage by the patient should also be done in addition to light, protected active range of motion exercises be three to five times per day.

In addition to that, there is something called kinesiotape that we’ve been working with for the past ten or so years. It is a tape that can be utilized for retraining, scar mobilization, muscle support, and swelling reduction. It came out of Japan in ’78, but I don’t think we got it until the ‘90s. It also helps to increase blood flow. It mimics the massage over the skin because it actually fits to the skin and it can stay on the person from anywhere from one day to five or more days. Because you wash it, it just acts like skin. Because it’s protecting the skin, as in the case of carpal tunnel, decrease the sensitivity of the skin and scar if that is a problem.

**Dr. Bengtson:** You’re mentioning a bit about certain instruments with certain problems. Perhaps, Dr. Amadio, you could state something about how certain diagnoses are seen with certain instruments?

**Dr. Amadio:** Ms. Valdata-Eddington’s already mentioned some of them, like thoracic outlet with cello. And there’s this whole issue about keyboarding and carpal tunnel syndrome, but I don’t think there’s any question that particularly for a piano that can be an issue. And unlike typing, for example, where typically you just have to put very light pressure on a keyboard to activate the key, in piano the whole point of it is sometimes you’re pressing hard and sometimes you’re pressing softly, and so the amount of loading can be quite considerable. Carpal tunnel syndrome in the right hand of pianists is certainly a common association. Most piano pieces are written for the right hand and I don’t think there’s any coincidence about that, that people who play the piano can have trouble with the carpal tunnel on the right side. For string players, it depends. For the violin or the viola, sometimes the left wrist can be postured in a fair amount of flexion as it’s holding the strings out towards the end of the instrument and so carpal tunnel syndrome there can sometimes be a problem, but more often cubital tunnel syndrome, and we haven’t talked about that, maybe we should talk a little bit about the treatment for that. The cubital tunnel syndrome in the left arm of string players, especially violin and viola, can be an issue. They also can have neck problems depending on how they hunch up their shoulder and neck to hold the instrument, as they typically do.

One of the other things that commonly also happens in the hand of clarinet players is they support the weight of the instrument with their thumb as they get more or less classical gamekeepers type thumb, where they stretch out the ulnar collateral ligament against the weight of the instrument. You often see people who are playing wind instruments who actually use a neck strap to take some of the load off of their thumb, because otherwise typically they’re bearing most of the weight of the
instrument along that one side of the thumb and the get an attritional stretching out of the ulnar collateral ligament of the thumb metacarpal phalangeal joint. So those are some of the common associations that you have with some commonly played instruments.

Dr. Bengtson: Dr. Baratz, certainly you have a particular interest in Blues musicians, do they have any specific injuries that they suffer?

Dr. Baratz: Cubital tunnel syndrome is commonly seen in harmonica players. They hold their elbows bent for extended periods of time while they play.

Dr. Bengtson: How about alternative medicine? Has anybody had any experience with musicians coming in to use any particular type of alternative medicine that is either a hindrance or help?

Dr. Baratz: I’ve got to tell you, I’m a big believer in aerobic exercise, I find that a lot of musicians tend to put a lot of effort into their music and don’t take care of themselves in terms of general conditioning. I’m a big believer in aerobic exercise. It doesn’t have to be more than just getting out and taking a walk. I also believe in the benefits of stretching, particularly using the techniques taught in yoga.

Dr. Bengtson: Well from a physiatrist’s standpoint certainly I’m a big believer in conditioning as well. I think that a lot of the musicians look a lot like my fibromyalgia patients. In fact, people that are poorly conditioned many times have chronic painful conditions and are focusing on the wrong thing. They tend to focus on their playing technique rather than what they’re doing with the rest of their body. And yes, I agree, certainly I’m a big believer in conditioning and posture and postural principles.

How about medication? Does anybody have any feelings about medications for musicians?

Dr. Amadio: I don’t see many musicians asking for a lot of medications. One that is often helpful in musicians is Inderal, because there’s a lot of performance anxiety that can be associated with play. A beta blocker can sometimes work wonders as far as their performance anxiety is concerned, but I haven’t found anti-inflammatory medications to be particularly helpful, because usually the problems are in the overuse or mal-use or inappropriate use family. The treatments really have to do with looking at their practice regimen and modifying that, and looking at their fitness status and working on that, rather than using drugs.

Dr. Baratz: I’ve become very wary about using anti-inflammatory agents in folks in general, particularly people who may not have a regular diet, such as young women and older people as they may develop gastritis.
Hand Surgery Quarterly

2005 Application for Research Grants

The AAHS Research Grant Awards were established to further the purpose of the Association as stated in its Bylaws and to foster creativity and innovation in basic and/or clinical research in all areas pertinent to hand surgery.

Awards and Eligibility

Grants will be made for a one year period to up to three investigators. Grants are available to all AAHS members. One of the investigators must be an active or affiliate member of the association.

Grant Application

Applications may be obtained from the AAHS website at www.handsurgery.org, or, you can call 312-236-3307 to request a copy.

Applications (an original plus seven copies) must be received by the committee chair no later than Monday, November 1, 2004, in order for the judging to be completed in time and the recipients to be announced at the Annual Meeting.

The AAHS and the Research Committee are required by the IRS to document disbursement of grant funds. Award recipients will be required to sign a letter of acceptance and submit a progress report once each year. The AAHS must be acknowledged as the source of funding in any presentation or publication. A final report must be submitted at the completion of the study. It is expected that the results of the funded research be submitted for presentation at an Annual Meeting within two years of the receipt of the award.

Funds must be returned to the AAHS if the study is not undertaken within twelve months of the receipt of the award.

Failure to follow these guidelines will disqualify the recipient from any further grant opportunities and from presenting any papers at the AAHS Annual Meeting for a period of three years following such default.

Mail Grant Proposals to

W. P. Andrew Lee, MD
University of Pittsburgh
3550 Terrace Street
Scaife Hall 690
Pittsburgh, PA 15261

Around the Table

continued from page 15

musicians. A lot of the musicians I see have a certain amount of depression if they can’t get back to playing their instrument either professionally or as an avocation. I think a lot of times it’s then important to send them to psychological counseling particularly in those that might be a career ending type of injury that they have. Does anybody have any ideas in regards to the psychological aspects?

Ms. Valdata-Eddington: I mentioned earlier that I have people see our social worker. She deals typically with traumatic hands but over the years has become a performing artist specialist. The social worker will get them to listen to various relaxation tapes and then coaches them to make relaxation part of their daily routine. If you just tell them to do it it’s always put to the side because they have so many other responsibilities. At the hand center again, I’m looking at the full body. So a lot of times I’m seeing scapula tightness and/or weakness depending on their muscles that are used. I have the patient lie down where it’s a restful area and treat them with moist heat as well as the pain reducing modality of JACE and/or interferential. The social worker will go in with the patient and speak with them while they’re in a more pain free state. They would practice that treatment at home as well.

One of the things you talked about is complimentary treatments. Many of the musicians have already gone previously to different alternative types of treatment. I think as adjuncts to therapy they can be great.

One activity that I have found to be best for the mind, body and spirit is Tai Chi. You’re utilizing your full body in very slow and controlled positions. I’ve found that for the musicians, Tai Chi will also have a calming effect over their body. These are some of the different techniques that I utilize.
An example is a patient of mine who was a six-foot, four-inch pianist who had not played with his left hand for four months. His initial diagnosis was a focal dystonia. He was also a basketball player, and he could not finish one basketball game without moderate fatigue. We did all the various treatments mentioned in addition to conditioning. When treatment was almost finished, we knew that it was a combination of different things causing his problem including overuse, technique change, a new school and recital practice and use of new muscles as well. He was not only able to return to play but he was also able to play two games of basketball and not even be tired. He was able to progress his piano play to complete his school year and senior recital. His case was an example of how we utilized something the patient enjoyed to improve the strength and endurance of his injured upper extremity as well as full body.

Dr. Bengtson: Dr. Amadio, you’ve mentioned that cubital tunnel syndrome on the left hand in stringed instruments, so how do you approach cubital tunnel syndrome in people that have to keep their elbow bent like that?

Dr. Amadio: Well it can be a problem, because you can’t really modify the instrument allowing them to extend the elbow, so often if it’s a problem you need to consider an ulnar nerve transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.

Dr. Baratz: I either do Susan Mackinnon’s version of the intermuscular/submuscular transposition or a subcutaneous transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.

Dr. Baratz: I either do Susan Mackinnon’s version of the intermuscular/submuscular transposition or a subcutaneous transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.

Dr. Baratz: I either do Susan Mackinnon’s version of the intermuscular/submuscular transposition or a subcutaneous transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.

Dr. Baratz: I either do Susan Mackinnon’s version of the intermuscular/submuscular transposition or a subcutaneous transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.

Dr. Baratz: I either do Susan Mackinnon’s version of the intermuscular/submuscular transposition or a subcutaneous transposition. I tend to base it on body habitus. People that are thin, I put the nerve beneath the muscle, and someone that’s got a little bit of padding, I’ll consider the subcutaneous transfer.

Dr. Amadio: Yes, well, unfortunately in the United States we rarely have that former category. But yes, I think that is true. It’s been my experience also that in someone who is thinner and doesn’t have very much subcutaneous fat, that the ulnar nerve can be tender in the subcutaneous position. I am a little hesitant in such cases, and normally I would do the exact same thing as Mark on that. Maybe that is something with a little bit of a difference with a musician as opposed to a non-musician, since I get a little worried about doing an operation that might affect the strength or use of the flexor pronator muscles. But usually a submuscular transposition works very well also, and it certainly does put the nerve in a good intermuscular plane. So that would be another option. Dr. Baratz, how quickly do you rehabilitate somebody after you’ve done with a little fascial flap can be something that can be done expeditiously. It doesn’t affect really very much the muscle function, so they can get back into musical activities within a week or two, and the rehabilitation can often be fairly rapid. So I think that that’s a reasonable operation, again, assuming that you have a clear and accurate diagnosis. This isn’t the operation for everyone with elbow pain, or who says that their hand gets numb from time to time. But if you’re quite confident that they have cubital tunnel syndrome, then I think that that can be a pretty effective treatment with good results and getting people back to play within a relatively short period of time.
that kind of a submuscular transposition?

**Dr. Baratz:** I put patients in a padded dressing and a sling. After two days they remove the sling and start moving their arm. I was always protecting the repairs of the flexor-pronator fascia. Patients don’t seem to have a lot of weakness after the submuscular transposition because the origin is very broad and you don’t slide the muscle very much. I have not seen much weakness of either the finger flexors of the wrist flexors.

**Dr. Bengtson:** Well, how do you all feel about operating on basilar thumb DJD in more elderly musicians, particularly pianists?

**Dr. Baratz:** I think that’s a hard problem, and I have a patient in my practice right now in that situation. The biggest issue with the thumb CMC arthroplasty is that any major hand procedure on a musician is going to affect their finger velocity. They may end up with a pain free thumb, but getting that thumb to move with the same speed that it did is going to be hard. That, to me, is the issue in any major joint reconstruction. I saw a pianist a couple of weeks ago who has terrible PIP joints and would like PIP arthroplasties. He’s younger and is a bad candidate because of the stress that’s going to be placed on the implants. In addition, we would have difficulty restoring velocity to his fingers.

**Dr. Amadio:** Now that’s a good point that Dr. Baratz brings up. Because of the velocity seen especially in a high level musician, the differences are so subtle between the top level, full-time professional musicians and the next rank down, which is a pretty much a club level. They’re so subtle that just the tiniest thing can knock somebody out of whack. Now I guess if someone has really bad symptoms and can’t play at all, playing some

---

**The AAHS Board of Directors and the 2004 Annual Meeting Program Committee would like to thank the following companies for their support and participation:**

- A.M. Surgical
- Acumed Instruments Corporation
- American Development Group, LLC
- Arthrex, Inc.
- Ascension Orthopedics, Incorporated
- ASPS
- ASSI, Accurate Surgical and Scientific Instruments Corporation
- Avanta Orthopaedics
- Carl Zeiss, Inc.
- Cook Surgical
- Cook Vascular Incorporated
- DePuy, a Johnson & Johnson Co.
- EBI
- Hand Innovations, Incorporated
- HealthSouth Corporation
- Hemedex, Inc.
- Instratek, Inc.
- Integra NeuroSciences
- KMI, Kinetikos Medical, Inc.
- LifeCell Corporation
- Lippincott Williams & Wilkins
- Micrins Surgical Incorporated
- MicroAire Surgical Instruments
- Microsurgery Instruments, Inc.
- Mitek Products
- NeuroRegen, LLC
- New Medical
- Ortheon Medical
- Orthofix, Inc.
- PMT Corporation
- Prime Clinical Systems Inc.
- Smith Barney
- Southwood Pharmaceuticals
- Stryker Leibinger
- Synovis Micro Companies Alliance
- Surgical Specialties Corp.
- TriMed, Inc.
- Wright Medical Technology, Inc.
is better than not playing at all. But if you’re talking about getting back to the very top rung, you have to be very, very careful. And for me the indication for doing something like thumb CMC arthroplasty is that the current symptoms are so bad that they cannot perform and that they would be willing to perform at a diminished level compared to their original level before they had the arthritis. If that’s where they’re at, then I think that you can help them. But you certainly shouldn’t try to promote an operation with the idea that they’re going to get back to their pristine, pre-arthritis state of musical performance. I think Dr. Baratz is exactly right, these philosophy issues are so important, and just the slightest thing setting things off by a millisecond can make the difference between whether or not they can play the piece properly or not. That is just too much to ask of an arthroplasty, and particularly something as gross as a resection arthroplasty which is typically what we end up doing for the thumb CMC joint.

Ms. Valdata-Eddington: I agree with both doctors. In my experience our doctors definitely would not opt for surgery unless it was mandatory and especially if it was the high performing person. Some of the people that I have treated that are younger that are just totally abusing their thumbs, we typically would have them splinted doing other activities of daily living, as well as have them in therapy for various pain reducing treatments and on home programs. We would try to either use silver ring splints, CMC protective splints, or whatever appropriate splint will try to protect the individual joint when they’re not playing. Then when they do play, they can use their thumbs more effectively!

Dr. Amadio: Well the only thing I’d like to say is that this is a really challenging area, but it also can be very rewarding. When I was a resident in Boston, Richard Smith was the hand surgeon at the time, and if a musician came in one door he walked out the other. He didn’t want to have anything to do with them because they were so complicated and difficult to manage. And I think they can be, but I think that as long as you keep a more holistic approach to these patients and think of them in a more global context, that it’s not just anatomy and physiology but that there’s a lot more involved, and that you have to develop a good team relationship, you can do OK. I know Ms. Valdata-Eddington mentioned this and I just want to emphasize it maybe as the bottom line: a team relationship, so that you have not only a surgeon on the team, but also a non-surgical physician, because most of the problems don’t require surgery. A therapist is great, and particularly someone with a physical therapy background. As Ms. Valdata-Eddington mentioned, a lot of the problems have to do with posture and so forth, areas where physical therapists may have additional experience. The team also has to include the musician and, finally but not least, the musician’s teacher. Every high level musician has at least one teacher and, finally but not least, the team also has to include the musician’s teacher. Every high level musician has at least one teacher. And you have to get the teacher on board because if you’re telling the patient to do one thing and the board because if you’re telling the patient to do one thing and the board because if you’re telling the patient to do something else you’re not going to get anywhere. So everybody’s got to be on the same page and I think that you can help them. But you certainly shouldn’t try to promote an operation with the idea that they’re going to get back to their pristine, pre-arthritis state of musical performance. I think Dr. Baratz is exactly right, these philosophy issues are so important, and just the slightest thing setting things off by a millisecond can make the difference between whether or not they can play the piece properly or not. That is just too much to ask of an arthroplasty, and particularly something as gross as a resection arthroplasty which is typically what we end up doing for the thumb CMC joint.

Ms. Valdata-Eddington: I agree with both doctors. In my experience our doctors definitely would not opt for surgery unless it was mandatory and especially if it was the high performing person. Some of the people that I have treated that are younger that are just totally abusing their thumbs, we typically would have them splinted doing other activities of daily living, as well as have them in therapy for various pain reducing treatments and on home programs. We would try to either use silver ring splints, CMC protective splints, or whatever appropriate splint will try to protect the individual joint when they’re not playing. Then when they do play, they can use their thumbs more effectively!

Dr. Bengtson: In interest of time perhaps we should wrap things up this evening. I want to thank everybody for participating tonight, thanks so much for lending your expertise. Any other closing remarks?

AMPAC Educational Opportunity

With the increasing need for political involvement on the part of the medical community, it is important for all of us to fine-tune campaign skills and learn the latest techniques. Please consider attending the AMPAC Campaign School scheduled for April 14-18, in Arlington, Virginia. This general five-day program is designed for those physicians interested in playing a role in political campaigns. This popular program is taught by a bipartisan team of top professionals. Topics include everything you’ve always wanted to know about the political, communications and fundraising aspects of campaigns.

The $1,000 tuition is waived and hotel rooms provided for AMA members and their spouses provided they are not currently candidates for federal office. Space is limited so please apply as soon as possible.

Applications can be obtained by contacting Lisa Friel, Manager of Political Education (phone: 202-789-7465 and email: Lisa_Friel@ama-assn.org), or downloaded from the web site at www.ama-assn.org/go/politicaleducation.
Common Hand Problems of Musicians

This issue of the Coding Corner focuses on the musician’s hand. For the purpose of our coding discussion, we will look at the problems of tendonitis, ganglions, and nerve compression syndromes.

Common tendonitis conditions include problems at the elbow, wrist and fingers. Lateral or medial epicondylitis surgery has several codes associated with it. The code 24350 is for a simple fasciotomy at the distal humeral epicondyle. If an extensor origin detachment is performed, use code 24351. Code 24352 refers to annular ligament resection, and codes 24354 and 24356 are when bony stripping or a partial ostectomy is performed, respectively.

Wrist tendonitis conditions that occur in musicians include deQuervain’s disease and flexor carpi radialis inflammation. Incision and release of the first extensor compartment corresponds to 25000. Release of the FCR sheath at the wrist is coded with 25001. Incision of the tendon sheath in the hand to treat a trigger finger is coded with 26055. If the pulley release is performed percutaneously, the code 26060 is appropriate (the exact description for this code uses the word “tenotomy” although the work involved is essentially the same as for a percutaneous tendon sheath release).

Note that ganglions of the wrist and digital flexor sheath can also be problematic in the musician’s hand. Excision of a primary wrist ganglion (dorsal or volar) is coded with 25111. If the surgery is performed for a recurrent lesion, use the code 25112. Removal of a digital flexor cyst is coded with 26160.

Nerve compression syndromes that can be associated with instrumentalmusicians include cubital tunnel syndrome, carpal tunnel syndrome, Guyon’s canal pathology, and radial sensory nerve compression. These procedures generally have 60000 series codes because the procedures involve nerve manipulation.

Carpal tunnel release performed via an open incision corresponds to 64721. If an endoscopic approach is undertaken, the code 29848 is appropriate. Cubital tunnel release and transposition of the ulnar nerve, by any means, corresponds to 64718. Note that if the flexor/pronator muscle mass is lengthened (such as a Z-lengthening), an additional code of 24305 may be considered. Decompression of the ulnar nerve at the wrist corresponds to 64719. Release of the radial sensory nerve in the distal forearm would qualify as “neuroplasty, major peripheral nerve, arm or leg” and consequently the code 64708 would be correct.

You Code It

A musician with chronic wrist tendonitis decides to pursue surgical options after conservative measures have failed to treat deQuervain’s tendonitis. Release of the first extensor compartment is completed as a single procedure.

Solution: 25000 Incision, extensor tendon sheath, wrist

Coding Corner Addendum

A previous column in this newsletter addressed coding for thumb carpometacarpal arthritis procedures. A clarification of coding options for CMC resection arthroplasty is warranted since the codes for this procedure are not completely straightforward.

The primary code to be used is obviously 25447. The real question is what additional codes are appropriate. Part of the problem is that...
there are a variety of ways to perform this operation and some of the available codes are vague. While adding code 20924 (tendon graft, from a distance) might initially sound more technically “accurate,” there are few problems using code 20924 as an add-on to 25447:

a) The graft can sometimes be obtained through the same incision.
b) The graft for this procedure does not actually qualify as being “from a distance” (it’s not like the plantaris or toe extensor).
c) The RVU assigned to 20924 is too small considering the work involved for the procedure.

With this in mind, the other codes that fit better are 25310 (tendon transplantation or transfer, flexor or extensor, forearm and/or wrist, single; each tendon) or 26480 or 26485 (transfer or transplant of tendon, CMC area of hand; without free graft, each tendon). Note that 26480 is for a dorsal graft and 26485 is for a palmar graft.

It should be noted additionally that the Global Services book does not bundle 25447 with tendon transfers or tenodeses, so additional codes for this operation are certainly appropriate. Also note that edits of the Correct Coding Initiative link code 25447 with code 25310, so one would need to use a -59 modifier when using 25310 with 25447.

In summary: when performing a CMC resection arthroplasty procedure that uses a tendon to function as an interpositional graft, it is probably your best option to code 25447 with 25310 and the -59 modifier, although 26480 (or 26485 if you use a palmarly based tendon graft) can also be used with 25447. I hope this helps clarify coding for this procedure.

---

**Ann C. Kammien PT, CHT**

**Personal:** I was born and raised in St. Louis, Missouri and still call it home. After Physical Therapy school at University of Missouri, Columbia, I returned to St. Louis not far from my parents and five siblings. My early career was spent in the hospital acute care and rehabilitation setting. I continue to find that inpatient experience helpful in the global assessment and treatment of upper extremity patients. In my first years out of school, I found that the topics I grew to know the best were the ones I had the opportunity to teach. With three PT schools and an active therapy community, there have been many opportunities to learn and share over the last 25 years. I currently work full time in a private practice. My husband and 2 teenage children are great supporters of the profession I love.

**Education:** BS (cum laude) in Physical Therapy in 1979; Certified Hand Therapist in 1991

**Employer:** Co-owner of private practice, Hand Therapy Inc., St. Louis, MO (11 years), with partner Christine Burridge PT, CHT. We are part of a larger network with 7 hand clinics in all. Earlier employment at a private practice, County Physical Therapy, Washington University at Barnes Hospital (Milliken Hand Center), and St. Mary’s Hospital affiliated with St. Louis University.

**AAHS Involvement:** Became an affiliate member in 1995. Co-authored Lateral Epicondylitis overview for Hand Therapist’s Corner in *Hand Therapy Quarterly* Autumn 1995. Attended Kona, Hawaii and Cancun, Mexico meetings. We find the quarterly newsletter to be a great learning tool and topic for discussion at our clinics.

**Best Part of My Job:** The best part of my job is the variety it provides. I enjoy moving from clinic patient care to covering doctor’s hours to preparing a lecture to negotiating a new lease all in one day.


**Clinical Specialties:** Trauma, arthritis, brachial plexus injuries.

**Greatest Challenge:** Being flexible on a daily basis. To continue to provide care in therapist owned settings, we continually have to change the way we see and do things. Billing, marketing, scheduling, and patient care are frequently being modified to reflect to latest in reimbursements issues and treatment options. We must think in small detail and in a global sense in the same thought.

**Three Words That Describe Me:** Lucky, grateful, welcome a challenge.
Benefits of drawing hands on your computer

Really understand what you are doing. If you can’t draw the anatomy, it may be because you don’t really know the anatomy. That was the point of drawing the brachial plexus. It’s an interesting and often humbling experience to compare what you’ve drawn to pictures of the real thing—you learn something every time.

It’s fault tolerant. Drawing programs let you choose and tweak the appearance of what you draw, but more importantly, let you undo, redo and modify what you’ve already done—like a word processor.

It looks better. Again, like the output of a word processor, the final document not only looks better, but usually is more understandable than a handwritten note.

Gain unique insights. Something special happens when you create a drawing of what you’ve done or what you plan to do, especially when you see the flaws in what you initially thought was correct. Also, there are certain anatomic relationships which are only apparent in when multiple images are compared by overlay, animation or a 3D view (Figure 1).

Plan new operations. Preoperative planning can be both simplified and enhanced by either drawing or electronically manipulating digital images. Preoperative planning of flaps and osteotomies are particularly suited to this (Figure 2).

Build a library of reusable images. This is a huge benefit. Once you’ve assembled a few templates of anatomy, you can dip back into the collection to create new images with very little effort. Vector graphic file format is perfect for this (Figure 3).

Augment your practice. Once you have images you’re happy with, you’ll find many uses for them in your practice. You can use your handiwork in brochures for patients, on your web site, in your powerpoint presentations, as logos for your office, and more.

Where to start?

In many ways, it’s all about the software. Graphics software can be very expensive, but are many free-to-under-$200 programs which are powerful enough to serve the purposes listed above. But before getting started on software, let’s review the terrain of the computer graphic world. Programs are often task oriented: like surgical specialists, they may perform certain operations, but not others. Here are some of the terminologies and categories of operations that a particular program may or may not handle.

Bitmap vs. Vector. This is analogous to the difference between digital and analog. Most graphics programs are either better at, or exclusively handle only one of these formats. Bitmap images are a collection of dots. Images obtained by a digital camera, a scanner, FAX machine, or individual frames of a video are bitmap images. Your web browser shows JPEG and GIF images—
these are bitmaps. They may be enhanced or added to in a paint or photo editing program, but the fundamental content is fixed. Enlarge them and they become blocky (“pixelated”); shrink them and you permanently lose detail. The dots remain static dots, discrete, digital. Vector images are not dots, but shapes created the same way that mathematical curves are defined by equations. Vector images can be resized without losing detail, and can be easily modified. Vector shapes are drawn by moving the control points (“handles”) which define the position and angle of lines (called “splines”). Those slick Flash animations on your web browser are vector graphics.

Modeling vs. Rendering. Drawing (modeling) programs create and modify the content. Rendering programs start with a vector format model and flesh it out with a choice of surface textures, lighting effects and backgrounds to create a final image.

Static vs. Animated. Some programs can be used both to create an image and make an animation. Animations can be made from a series of bitmap images, starting with one image per frame, which is fairly labor intensive. Animating from vector formats is much easier, using a process called “tweening”. With tweening, you create a picture, label it as the first frame of an animation, then modify it and label it as the last frame, and the computer creates all of the frames in between. Cool! Because of shortcuts such as this, vector image formats are used to create essentially all commercially produced animations, including computer generated movies, cartoons, video games, and Flash animations.

2D vs. 3D. A 2D program treats the computer screen like a canvas, viewed from one angle—the picture is the canvas. 3D programs work with models: three dimensional surfaces which can be independently moved, viewed from different angles, and painted (“rendered”). 3D models are all vector-based, but can export scenes to individual bitmaps or animations. Most 3D programs are capable of animating and tweening.

Realtime vs. Scripted. The user friendly image construction programs are “what you see is what you get”. But remember, you’re not painting with a paintbrush, you’re giving a computer instructions. Some older or high end CAD and rendering programs operate from a set of instructions that you provide. These are not for the casual user.

Structural vs. Organic. Structural programs, such as CAD drawing programs are geared toward producing diagrams and pictures of machinery, buildings, or landscapes—inorganic structures. Organic drawing programs are more suited to drawing cartoons—and hands.

Programs

OK, enough about the lingo, show me the stuff! Here are the core programs that I have found useful to make images and animations of hands for my office, the web, powerpoint, and just to help me figure things out for myself. Most of these are not mainstream—I use them because they do what I want. There are many, many more out there.

Arts and Letters Express (www.arts-letters.com) is a 2D, vector based, static image, organic flavored program geared to cartooning. I started using it 10 years ago because it came with nice anatomy clip art including the hand. Excellent tool to draw for web or print publication.

Poser (http://www.curiouslabs.com) is a 3D organic program which comes with a library of human figure models and 3D hand models with individual controls for positioning of every digital joint! It produces animations with tweening and will render to look like a cartoon, wireframe, pencil sketch, realistic texture and others with great flexibility (Figure 4).

Paint Shop Pro (http://www.jasc.com) is primarily a 2D bitmap drawing program with some vector based tools. Comparable to the Adobe line but less expensive, it handles a variety of file formats (Figure 5).

Hamapatch (http://www.geocities.com/hamapatch/program/ndl) is a free, powerful 3D static organic modelling program with some rendering capability. It’s a great program to create 3D shapes which can then be imported into other animating or rendering programs (Figure 1).

Moho (http://www.lostmarble.com) is an inexpensive 2D vector cartoon animation program which can export to flash animations.

...continued on page 24
THE DIGITAL HAND

continued from page 23

Truespace is a powerful 3D rendering and animating program (Figure 3). Version two is available free at http://www.jltsi.com/download/truespace.zip. Flash (http://www.macromedia.com) is a versatile 2D vector animation creation program which is the industry standard for web animations. Two problems: a fairly steep learning curve, and a $500 price tag. Options: get it or get programs which export to it, such as Moho.

So. There’s no excuse. Start drawing hands!

THE DIGITAL HAND
continued from page 23

Truespace is a powerful 3D rendering and animating program (Figure 3). Version two is available free at http://www.jltsi.com/download/truespace.zip. Flash (http://www.macromedia.com) is a versatile 2D vector animation creation program which is the industry standard for web animations. Two problems: a fairly steep learning curve, and a $500 price tag. Options: get it or get programs which export to it, such as Moho.

So. There’s no excuse. Start drawing hands!

For information contact: AAHS Central Office at 312-236-3307 or www.handsurgery.org

AAHS Calendar

2004

May 21–23, 2004
Work Related Disorders of the Upper Extremity
Wyndham Chicago
Chicago, IL

July 9–11, 2004
Mid-Year Board of Directors’ Meeting
St. Regis Monarch Beach Resort
Dana Point, CA

September 9–11, 2004
American Society for Surgery of the Hand – 59th Annual Meeting
New York, NY

2005

January 12–15, 2005
35th Annual Meeting
Sanibel Harbor Resort
Sanibel Island, FL

July 15–17, 2005
Mid-Year Board of Directors’ Meeting
The Lodge & Spa at Cordillera
Edwards, CO

September 22–24, 2005
American Society for Surgery of the Hand – 60th Annual Meeting
San Antonio, TX

2006

January 11–14, 2006
36th Annual Meeting
Loews Ventana Canyon Resort
Tucson, AZ

July 14–16, 2006
Mid-Year Board of Directors’ Meeting
The Broadmoor Hotel
Colorado Springs, CO

September 7–9, 2006
American Society for Surgery of the Hand – 61st Annual Meeting
Washington, DC

2007

January 10–13, 2007
37th Annual Meeting
The Westin Rio Mar Beach Resort
Rio Grande, Puerto Rico

2008

January 9-12, 2008
38th Annual Meeting
The Westin Century Plaza Hotel & Spa
Beverly Hills, CA

2009

September 7–9, 2009
American Society for Surgery of the Hand – 62nd Annual Meeting
Las Vegas, NV

For information contact: AAHS Central Office at 312-236-3307 or www.handsurgery.org

Inside This Issue:

1 2004 Annual Meeting In Review
3 From the President
5 Leadership Profile: N. Bradley Meland, MD
9 Hand Therapy & Affiliates’ Corner
10 Hand Surgery Endowment Update
11 Around the Hand Table: Hand Problems of the Performing Artist
20 Coding Corner
21 Hand Therapy Profile
22 The Digital Hand Surgeon