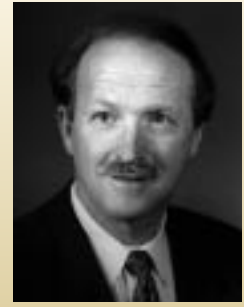




BRIGHAM AND WOMEN'S HOSPITAL

THOMAS S. THORNHILL, MD, CHAIRMAN



Harvard University has a new president after an extensive search with people like Bill Clinton and Al Gore mentioned in the mix. Lawrence H. Summers, PhD, a 46-year-old former Harvard professor of economics will arrive on July 1 and assume the reigns from Neil Rudenstine as the 27th president of the University.

Meanwhile, the Boston Healthcare scene also seems heading for change. The Harvard teaching hospitals are stratified into Partners Healthcare (Brigham and MGH) and CareGroup (Beth Israel/Deaconess Medical Center). The Veteran's Hospitals consisting of the West Roxbury and Jamaica Plain Veteran's Hospitals have merged, and we are still sorting out orthopaedic care in the VA system. Harvard and Boston University are sharing academic responsibilities and our own Dr. John Ready is leading the Harvard unit during this transition. After seeing no rate increases since 1996, the Partners Healthcare system has recently renegotiated with Tufts and Blue Cross and is currently in negotiations with Harvard Pilgrim (the third major payer). As Stephen Heffler, deputy director, healthcare-financing administration said, "Things are reversing. Managed care was able to negotiate price discounts with providers--that is why they had lower costs. That was a one time effect." This will result in premium increases that had been flat in Eastern Massachusetts for some time. This, coupled with some amendments to the balanced budget act should provide some needed relief for academic medical centers--but enough of the political stuff. A wise man once said, "Don't tell people your problems. Half the people don't care and the other half are actually glad you've got 'em." With that advice, I would like to share with you a year marked by growth, change and what many of us feel are positive steps in the right direction.

NEW APPOINTMENTS

Several additions to our staff this past year have expanded our services while maintaining our quality of care. Double-digit growth has placed a strain on our infrastructure and necessitated moves to satellite facilities.

Dr. Christopher D. Chiodo has recently joined our staff on the Foot and Ankle Service. Chris was a 1999 graduate of the Harvard Residency and was Chief Resident here at the Brigham. He was awarded the William H. Thomas Award for Excellence in Orthopedics, given annually to the resident who has "contributed the most to resident teaching and provided inspirational leadership through outstanding dedication to patient care". After finishing his residency, Chris was a foot and ankle fellow with Dr. Mark Meyerson at Baltimore. Since

joining Dr. Mike Wilson in the Foot and Ankle Service, Chris has been both clinically and academically productive and is certainly going to be a great addition.

The Foot and Ankle Service has grown further with the addition Dr. James Ioli to head our Podiatry Program. This program is docked within the Foot and Ankle Service giving us a rather unique symbiotic rather than adversarial relationship. I have known Jim for many years through his association with Braintree Hospital. Jim originally trained in Ohio and with further residency training in New England. He has most recently been in private practice in Stoughton, Massachusetts and in his short tenure has proven to be an invaluable member to our clinical service as well as our outpatient operations.

Our latest addition has been Dr. Wolfgang Fitz. Wolfgang trained in Munich and practiced orthopedics in Germany prior to joining us two years ago as an international fellow. During his fellowship he became involved in many research projects and we encouraged him to stay for a second year. Wolfgang is not only a skilled surgeon in primary and revision arthroplasty, but his research credentials are impeccable. He has already been centrally involved in two patents obtained by the Brigham and Women's Hospital. His work has been presented at the Orthopaedic Research Society this past year and he will continue with both a clinical and research direction making him a true "double threat".

I am very pleased to announce that Dr. Malcolm Smith (or rather, Mr. Malcolm Smith) will be joining us sometime this summer to help a growing Partners Trauma Service. Dr. Mark Vrahas has done an outstanding job at the Brigham and Mass General and has been a positive force throughout the Partners network (North Shore Hospital, Newton-Wellesley). Malcolm is currently a consultant surgeon at St. James University Hospital in Leeds, UK. He is a senior clinical lecturer in Orthopedic Surgery at the University of Leeds. Malcolm returns to Boston having been an orthopedic fellow with Dr. John Hall at Children's. He was also a trauma fellow with Dr. Joel Matta in Los Angeles and he combines his experience with trauma and spine to run a very large program in the UK. His clinical and research interests dovetail nicely with Mark Vrahas' and his established credentials will be a great boost to our growing trauma program. Malcolm, his wife Mary and two children will be joining us sometime at the end of the summer and adjusting to a new life here in the "Colonies".

Dr. Sheila Dugan a physiatrist with an academic appointment through Spaulding has joined our staff in the

Musculoskeletal Service. Sheila has invigorated our outpatient department and will be working in our musculoskeletal center with both orthopedists and rheumatologists to facilitate outpatient care. This gives us an opportunity to concentrate on some critical issues of rehabilitation, repetitive stress injury, and nonoperative spine problems to name a few.

Dr. Mark Brezinski has joined the Orthopedics Department as the first "Orthopedic Cardiologist". A trained cardiologist, Mark has adapted many of his innovations studying vascular endothelium to the evaluation of damaged and healing cartilage. Mark is a leading authority on optical coherence tomography (OCT) and is working with Dr. Scott Martin and others in the Research Department.

We anticipate further growth and are in final negotiations to enhance our community orthopedic program as well as our hand and upper extremity service--more to come next year.

PROGRAMMATIC GROWTH

The Foot and Ankle Center is up and running at Faulkner Hospital. Dr. Mike Wilson the Partners Foot and Ankle Director is leading this effort and, in fact, has just enrolled at Babson College in their MBA program (he promises me that it is part time). The Foot and Ankle Center at the Faulkner Hospital provides us with a convenient place for patients to be seen as well as to utilize both outpatient and inpatient facilities for both orthopedic and podiatric care. We hope to centralize many of our Partners Foot and Ankle activities at this center.

The Cartilage Repair Center (CRC) is located administratively and clinically at our 850 Boylston St. practice. Dr. Tom Minas is director and collaborates with several of the research laboratories at the Brigham and the Harvard Medical School. A dedicated portion of the Joint Arthroplasty Fellowship is devoted to cartilage repair and Tom has become a national leader in this arena. While having the largest experience in autologous chondrocyte implantation in this country the CRC also specializes in osteotomies, OATS procedures and, when needed, arthroplasty. Dr. Carl Winalski from the radiology department, our resident MRI expert, has joined us part-time in the CRC to facilitate ongoing clinical and research efforts. Breaking down some of the traditional departmental silos has been a challenge but this is one of several examples in our Musculoskeletal Services where cross-departmental collaboration has worked.

The Spine Service continues to grow hampered only by availability of OR time. With Dr. Sheila Dugan and a group of rheumatologists we plan to expand our nonoperative, preventative and rehabilitation aspects of spine care. Dr. Rich Ozuna and Dr. Greg Brick have a strong working relationship with our Neurosurgical colleagues and this service is one of our largest growth areas.

Partners Shoulder Service continues to expand with Dr. JP Warner being pulled in many directions. We will all be happy (especially JP) when we expand the service both at the Brigham and the Mass General with the addition of a new surgeon.

Partners Trauma service under Dr. Mark Vrahas has assumed the bulk of the trauma training and research and

Malcolm Smith's arrival should help us a great deal. We have a strong trauma registry, a new Fellowship and what is probably the best case of integration between the Partners Academic Centers and the Community Hospitals.

What you may have known as the Harvard Community Health Plan (HCHP) has gone first to Harvard Pilgrim Health Care (HPHC) and now Harvard Vanguard Medical Associates (HVMA). Dr. Hy Glick has assumed leadership of the Orthopaedic Division and we are working together to build this practice closely integrated with the Department.

RESEARCH ACTIVITIES 2000-2001

The Orthopaedic Research Laboratory, directed by Myron Spector, PhD, continues to grow and thrive. One of the high points was the 2001 Kappa Delta Award, which recognized Dr. Spector's contributions to the study of contractile cells in musculoskeletal tissues. The tissue engineering section continues investigating collagen-GAG matrices for several musculoskeletal tissues. The lab has been well represented at many national and international meetings this year, with numerous poster and podium presentations at the ORS meeting in San Francisco and 16 original peer-reviewed papers published this year.

The Skeletal Biology Laboratory, headed by Julie Glowacki, PhD, continues its strong record of research in the area of skeletal aging, principles underlying cartilage and bone repair, and methods for tissue regeneration. It was awarded grants from the NIH, the Department of Defense, and several commercial entities. There were 9 peer-reviewed papers and 5 book chapters, including one in the recently published Bone Engineering, edited by J.E. Davies. Dr. Glowacki continues her work as a national leader in this field by serving on the Council of the American Society of Bone and Mineral Research. Shiuchi Mizuno, PhD, has continued his development of a state-of-the-art tissue engineering processor that can be used for cell-based therapy. This processor allows for culture of any kind of cell at various programmed oxygen concentration, shear stress, stretch motion, and fluid pressure as well as massage. Karen Yates, MD, has continued her work in chondrocyte differentiation, distraction osteogenesis, and cartilage engineering.

Drs. Chris Evans and Steve Ghivizzani have spent the past year setting up the Center for Molecular Orthopaedics in the Longwood Medical Area. One of the many positive additions to the Partners Orthopaedic program, this will be the center for ongoing studies of gene therapy in musculoskeletal disease. In spite of their down time limiting the amount of new data generated they have published eight research papers from previous studies, two books forthcoming and a review in CORR on Orthopedic Gene Therapy. With two new NIH grants and many in the pipeline, this lab is up and running. Moreover, Chris and his colleague Paul Robbins at Pittsburgh won the inaugural Synos Foundation Prize for Orthopaedic Research.

Anuj Bellare, PhD has continued his work, with the support of a Whitaker Grant, in using nanotechnology to improve the performance of PMMA in arthroplasty. Sonya Shortkroft, PhD has expanded her study of the inflammatory cytokines in

rheumatoid synovium. Wolfgang Fitz, MD won the National Orthopaedic Fellowship Foundation award for research, and has been pursuing his research on cartilage engineering, as well as development of new bone cements. Anuj, Wolfgang, Sonya, Andreas Gomoll (PGY1 orthopaedic resident), Dick Scott and I have been working together in the clinical application of nanotechnology, wear studies, and bioreactivity to wear debris.

Martha Meaney Murray, MD, was the winner of the national AOSSM 2001 Cabaud Award for basic science research, as well as the OREF Charles H. Herndon Research Award, for her work on regeneration of the ACL after rupture. She has been awarded grants from the NIH, CIMIT and OREF. She has also been invited to serve as one of the senior editors for the forthcoming AAOS textbook for medical students, *Musculoskeletal Medicine*. Martha has been an active member of our HVMA staff and will juggle her research duties with a Sports Fellowship with Dr. Lyle Micheli.

The Optical Coherence Tomography (OCT) Laboratory, under the direction of Mark Brezinski, MD, PhD, joined the Brigham Orthopaedic research team this year. The greatest advantage of OCT over existing technology is its resolution, which is up to 25X higher than anything available in clinical medicine. Additional advantages of OCT are its high data acquisition rate (video rate), small catheter size (<1 mm), and ability to be combine with spectroscopy. Dr. Brezinski has done extensive work in this imaging field, and was recognized for his study of articular cartilage with the Presidential Award for Scientist and Engineers from President Clinton. Dr. Brezinski, in collaboration with Dr. Scott Martin, has recently demonstrated the first *in vivo* articular cartilage imaging. They demonstrated that polarization sensitive imaging (PS-OCT) could be used for diagnostic purposes.

TEACHING PROGRAM

With the growth in our department and the metastasis to the satellite facilities we have placed a great strain on our residency and fellowship staff. With the leadership at the Brigham of Dr. John Wright in residency education and Dr. Richard Scott, director of the Arthroplasty fellowship, our teaching program is in good hands. This year we will add another PGY1 resident at the Brigham and we have recently undergone a programmatic review to assess the best distribution of residents to assure us that we provide the best educational experience. The Brigham Fellowship Program

continues to grow. Our current total joint fellows are Dr. Mark Metzger from Oregon, Dr. Darren Kerr from Canada, Dr. Kurt Unverferth from Duke and Dr. Creg Carpenter, a graduate of the Harvard Program. Moreover, we have continued to have a group of extremely talented international arthroplasty fellows working on both the clinical and research sides. Our current international fellows are from Australia, Switzerland and Korea. Dr. Lars Richardson, recent graduate of the program is the current Foot and Ankle Fellow. Our Hand Fellows are Paul Protomastro and Doug Paterson. Our Sports Medicine Fellow is Jorge Villafuerte and our Spine Fellow is Dr. Simon Mills from New Zealand. Our current Chief Resident, Dr. Andrew Yun has been doing a good job and will be followed by Dr. Greg Erens. Greg will stay on as a joint arthroplasty fellow the following year.

ALUMNI NEWS

Dr. Robert Poss has just stopped operating but is staying on in a non-operative capacity. Much of his time is spent as Deputy Editor for Electronic Media at the *Journal of Bone and Joint Surgery*. I am very excited about the work that Dr. Jim Heckman and Bob are doing and you will see a new face of the JBJS with an emphasis on electronic media.

Clem and Georgia Sledge are still in Marblehead but spend much of their time in their Maine home. We get to see him usually when he brings his grandchild for routine care at Childrens. Clem has been super to offer advice when asked but never once has interfered or second-guessed our changing program. Bill and Dickie Thomas divide their time between Brookline, Martha's Vineyard and Naples, Florida. Bill remains active with his flying and devotes time to both Angel Flight and the Civil Air Patrol in Naples, Florida. Angel Flight is a service to provide patients and family members air transportation for necessary appointments and hospitalization. While in Florida, Bill works with the Civil Air Patrol to monitor the coast between Naples and Captiva looking for stranded boaters. His next adventure will be a flight with a former classmate and naval aviator.

Dr. Fred and Sarah Ewald divide their time between Boston and Colorado and from what I hear the Ewalds, Thomas's and Bob and Sandy Boyd have a "ratpack" group that spends a lot of time in Florida and various vacation homes. The Posses plan to join them all on a trip to Africa this fall underscoring the important point that there is "Life after Orthopaedics".

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Co-editor, The Aging Skeleton - Academic Press

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