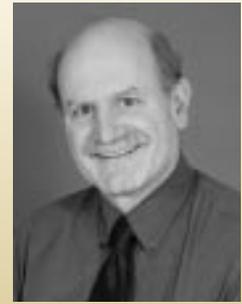




# THE CHILDREN'S HOSPITAL

JAMES R. KASSER, MD



Greetings from Children's Hospital to alumni, colleagues, and prospective trainees. Children's Hospital continues to be an active vibrant environment for the care of children with musculoskeletal problems. After a stormy financial year, the hospital has stabilized its bottom line and begun new building and capital campaign programs. A new research building has just gotten underway and a new clinical building will be started within the next year. Within the Department of Orthopaedics at Children's, we have continued to grow, with a 10% increase in outpatient clinical and surgical volumes. We presently see a total of 42,000 outpatient visits between the Orthopaedic Program and Sports Medicine and do approximately 3500 cases per year. Most of these are done on the main campus but a small number are now done at Lexington and other satellite sites.

## CLINICAL PROGRAM

Within our department, a Division of Sports Medicine under the direction of Dr. Lyle Micheli, and a Division of Spinal Surgery under the direction of John Emans now complement the solid base in pediatric orthopaedic surgery. Our department has continued its administrative redesign towards centralization of business and support functions to provide greater efficiency. This has been a challenging task to accomplish, as any orthopaedic surgeon with administrative responsibilities will understand. Mr. Jim Cote, our department manager for the past year, has played a pivotal role in the transition to our new, more efficient system. The benefits of an improved centralized practice are not only financial but also lead to improved patient satisfaction and departmental growth, which in turn facilitate teaching and research, which are central to our mission.

The institution of a centralized surgical scheduling group with dedicated surgical schedulers has increased our use of block time to well over 90%. The patient satisfaction with this new system of scheduling has improved as well. Patients meet the surgical scheduler at the time of their outpatient visit. The scheduler coordinates all preoperative studies and obtains insurance referrals and preapprovals.

In response to the huge number of requests for urgent orthopaedic visits, we have hired two nurse practitioners, Rachel DeFazio and Elizabeth Shannon. Both are advanced practitioner nurses and are participating in research programs in the ambulatory area. Patients who need to be seen on the day of a call are seen by a nurse practitioner with orthopaedic surgeon backup to provide further treatment and analysis. This has increased our ability to respond to emergencies, while

also allowing us to provide more attentive care to regularly scheduled patients. Rachel and Bess complement the other nursing staff in our department, Peggy Gartner, Carol Nolan and Paula Donahue, who coordinate the running of our busy clinics and help to provide much patient care.

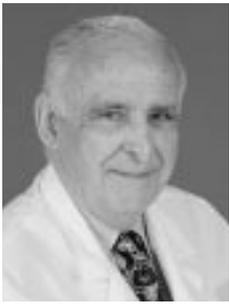
## NEW STAFF

Over the past year we have added two new physicians to our staff. After completing his undergraduate work at Dartmouth College and medical school at Duke University, Dr. Mininder Kocher completed the Harvard Combined Orthopaedic Residency Program in 1998. After residency, he completed a pediatric orthopaedic fellowship at Children's Hospital, obtained his master's degree in Epidemiology and Public Health at the Harvard School of Public Health and also completed a fellowship in sports medicine and arthroscopy at the Steadman Hawkins Clinic in Vail, Colorado. Min complements the program as the Director of the Clinical Effectiveness Unit. This clinical research unit is its formative stages with plans to expand our clinical research activities to a point where extramural funding is possible. Min's clinical interests are in trauma and sports medicine. He is developing a program in hip arthroscopy, which is already yielding great dividends in providing a service not previously available here at Children's.

Dr. Young-Jo Kim is the second individual to join the staff this year. Young-Jo is an outstanding young man who also did his residency in the Harvard Combined Orthopaedic Program, finishing in 1999. Subsequently, he did a fellowship here at Children's Hospital. After finishing his pediatric orthopaedic fellowship, Young-Jo spent time at Scottish Rite Hospital in Texas. Young Jo's background is unique in that he has a Ph.D. in electrical engineering from MIT, having written his thesis on the physical regulation of cartilage metabolism, specifically looking at the effects of compression on matrix components in spatial distribution. Building on this background and an interest in pelvic osteotomies, Young-Jo and Mike Millis have obtained an OREF grant to study the effects of osteotomy on cartilage metabolism and preservation. Unbelievably, Young-Jo was part of a team winning a Kappa Delta award prior to starting residency. Young-Jo Kim will be spending two days a week at MIT continuing his research endeavors, as he develops his clinical practice specializing in hip and lower extremity surgery here at Children's Hospital.

## OLD STAFF

To update you on "old" staff, John Hall formally retired from surgery in July of 2000. Our group has always valued the



**John E. Hall, MD**  
Professor of Orthopaedic  
Surgery, Harvard Medical  
School.

surgical expertise of Dr. Hall. Because of this, we have worked out an agreement with him where we continue to have him work with us in the OR on selected cases. Dr. Hall continues to see patients on Tuesday and Thursday mornings, providing consultation and follow up for patients both locally and from points around the world. We are grateful for his continued efforts and support of our evolving program. He can always be spotted at 6:30 am conference when he is in town.

### PROGRAM DEVELOPMENT

There are a number of specific clinical programs, which are developing under the direction of individual faculty members. The first of these is an Erb's palsy/brachial plexus repair program under the direction of Dr. Peter Waters. He has done this in cooperation with the Pediatric Orthopaedic Society of North America with the use of their web site allowing multiinstitutional studies to be done. Dr. Waters has published numerous papers in the area of Erb's palsy and with this effort hopefully answers to the appropriate use of nerve repair, as well as tendon transfer will be forthcoming.

Dr. John Emans in the Division of Spine Surgery has continued to evaluate long term outcome from spinal fusion and effects of corrosion from metallic devices. In addition, we are participating in a new program to evaluate the efficacy of an experimental titanium rib device for chest wall expansion. Dr. Emans has worked with Dr. Robert Campbell from San Antonio, Texas to develop the device. They present their indications and technique in this issue of the Journal.

The adolescent and young adult hip program, which is under the direction of Dr. Michael Millis, continues to grow and thrive. One to two periacetabular osteotomies are being done per week now, on patients age 11 into young adulthood. The patients are evaluated pre- and post-op using a special MRI protocol to assess articular cartilage. Innovative surgical approaches have been developed to spare abductor muscles and improve postoperative care. Other programs that are evolving and growing at Children's include cerebral palsy, musculoskeletal oncology, trauma, and sports medicine.

### TEACHING

Five Harvard Combined PGY-3 residents are the core of our house staff, and they are joined by a Lenox Hill resident. The relationship with Lenox Hill has been long standing with over a 25-year history. We continue to have the privilege of instructing this hard-working and intelligent group, providing a six-month rotation in pediatric orthopaedics. The lecture program each morning including basic science, fracture, and clinical case presentations in pediatric orthopaedics. The format has been the same for the last five years, however the lectures are well received by the residents and continue to improve. The teaching program in the ambulatory area



**Figure 2:** Fellows reunion with Dr. Mercer Rang, the fourteenth David Grice visiting professor, November 2000.



**Figure 3:** The fall residents and staff Children's Hospital, 2000



**Figure 4:** Spring residents and staff 2000.

has been enhanced by our remodeled workspace, as we now have more room and view boxes for case presentations and discussions.

Our past two chief residents, Dr. Paul Weitzel and Dr. David Kim, from the Harvard Combined Program, have done an excellent job of organizing the clinical and educational program for the residents, while honing their clinical skills. Paul is going to be doing a Sports Medicine fellowship with John Richmond at Tufts/New England Medical Center and David Kim will be moving on to a spine fellowship in Philadelphia.

The high point in our educational program this year was a reunion of all fellows for the past 20 years at this year's Grice Day, featuring the fourteenth Grice Lecturer, Mercer Rang. Mercer spoke on creativity, as well as delivering a lecture on fracture care. It was an excellent reunion in which all returning fellows presented papers. A cocktail party and dinner followed at the downtown Harvard Club. We look forward to having similar fellow reunions every 3-4 years.

Our fellowship program continues to attract very high quality individuals from around the country. Three fellows completed the program at the end of July 2000, Drs. Hieu Ball, Aenor Sawyer, and Young-Jo Kim. Hieu is pursuing a fellowship in spine surgery in Los Angeles. Aenor Sawyer has moved to the Bay area in Northern California in an active pediatric orthopaedic practice. She will continue her research in bone density in children and particularly in children with pathologic conditions at Stanford and Oakland Children's Hospital. She completed a project on triplane fractures while a fellow here at Children's Hospital. Finally, Young-Jo Kim completed his fellowship and has joined us on staff here at Children's.

Our present fellows are Dr. Tim Schrader, who came to us from Tulane University in New Orleans, Louisiana, and Dr. Dan Hedequist from Texas Southwestern, Dallas, specifically from Texas Scottish Rite Hospital in Dallas, Texas. These two clinical fellows are outstanding and have great careers ahead in pediatric orthopaedics.

#### **RESEARCH**

We continue to maintain both a clinical and basic science research focus at Children's Hospital. In order to enhance our research programs, Dr. David Zurakowski joined our staff two years ago as principal biostatistician, and was recently promoted to Assistant Professor of Orthopaedic Surgery at Harvard Medical School. David is actively involved at Brigham and Women's Hospital, Mass General, and Beth Israel Hospital supporting the orthopaedic research efforts. It is gratifying to see cross-institutional endeavors thrive, and David has been very successful in accomplishing this.

In the basic science arena, Dr. Melvin Glimcher remains the Director of the Laboratory for Skeletal Disorders. His laboratory research program has been focused primarily in mineralization and matrix biology of bone. Dr. Glimcher continues to be very successful in obtaining competitive grant funding at an impressive rate. His present interests range from the molecular biology of cartilage growth to the physical chemistry of crystal formation in bone.

Dr. Peter Hauschka and his group are focusing on the molecular environment favorable to tumor skeletal metastasis, as well as the physiology of osteoclasts. Two of his junior collaborators, Drs. Kevin McHugh and Keith Solomon, are active within the lab, working on cell cell communication and control, particularly relating to osteoblasts and osteoclasts.

Dr. Brian Snyder is the co-director of our cerebral palsy program here at Children's Hospital, but in his basic science life he is serving as the interim director of the Orthopaedic Biomechanics Lab at Beth Israel Hospital. His focus remains on bone density related to fracture risk. He is active in testing the strength of various bone fixation techniques, as well as spinal instrumentation within the lab.

#### **PHILANTHROPY**

The growth of our fellowship and research programs would not be possible without the philanthropy of a number of individuals and foundations. I would like to formally thank and recognize the Peabody Foundation in Boston, the Egans, the Brewers, and the Hoffmans for their generous support of our department over the past year. The expansion of our research efforts would not be possible without their support.

#### **SUMMARY**

Children's remains alive, well and expanding. For all friends, alumni, and future trainees I welcome you to visit Children's Hospital, and hope that you will share the excitement that we have for our present program.

Sincerely yours,

James R. Kasser, MD

## Department of Orthopaedic Surgery, The Children's Hospital

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Harvard Medical School

Orthopaedic Surgeon-in-Chief  
Children's Hospital

President, Pediatric Orthopaedic Society  
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Council on Education and Task Force on Educational  
Effectiveness, AAOS

Subcommittee of Professors  
Harvard Medical School

Vice President of Physicians Organization  
Children's Hospital

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Harvard Medical School

Director, Division of Spine Surgery  
Children's Hospital

Board of Directors, Scoliosis Research Society

Board of Directors, International Spine Society

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Harvard Medical School

President, Musculoskeletal Tumor Society

Director, American Board of Orthopaedic Surgeons

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Harvard Medical School

#### **John E. Hall, MD**

Professor of Orthopaedic Surgery  
Harvard Medical School

#### **M. Timothy Hresko, MD**

Assistant Professor of Orthopaedic Surgery  
Harvard Medical School

Orthopaedic Medical Student Education Director  
Harvard Medical School

Trauma Committee, Children's Hospital

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Chairman Research Committee, POSNA  
Editorial Board, Journal of Pediatric Orthopaedics

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Past President, American Academy of Cerebral Palsy

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Acting Director, Orthopaedic Biomechanics Laboratory

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Children's Hospital

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Lecturer in Orthopaedic Surgery  
Harvard Medical School

Clinical Professor of Orthopaedic Surgery  
Tufts Medical School

#### **David Zurakowski, PhD**

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Harvard Medical School

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#### **Pediatrics**

**Daniel J. Hedequist, MD**

**Tim Schrader, MD**

#### **Sports**

**Andrea Straccolini, MD**

**Peter Salob, MD**

**Keith Loud, MD**

### **Basic Science Faculty**

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Harvard Medical School

Director, Laboratory for the Study of Skeletal Disorders  
and Rehabilitation, Children's Hospital

Research: Mineralization of Bone;  
Phosphoproteins in Bone and Cartilage

#### **Peter V. Hauschka, PhD**

Associate Professor of Orthopaedic Surgery  
Harvard Medical School and Harvard Dental School

Research: NO in Bone Resorption;  
Cytokines in Growth and Bone Repair;  
Breast Tumor Metastases to Bone

#### **Frederic Shapiro, MD**

Associate Professor of Orthopaedic Surgery  
Harvard Medical School

Research: Bone Healing and Cell Interactions

#### **Erdjan Salih, PhD**

Assistant Professor of Orthopaedic Surgery  
Harvard Medical School

Research: Phosphokinase Sites in Phosphoproteins;  
3-D X-ray Crystallography

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Harvard Medical School

Research: Immunological Factors in Bone Healing

#### **Keith R. Solomon, PhD**

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Harvard Medical School

Research: Membrane Mechanisms of Growth Factor  
Signaling Regulation in Osteoblasts

#### **Kevin McHugh, PhD**

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Research: Integrins and Bone Resorption

#### **Yaotang Wu, PhD**

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