

# **Shriners Hospitals for Children, Portland Pediatric Orthopaedic Fellowship Program**

## **Educational Goals:**

Shriners Hospitals for Children, Portland Department of Orthopaedic Surgery Fellowship in Pediatric Orthopaedics is a 12-month Fellowship. The goal of our Pediatric Orthopaedic Fellowship is to educate the Fellow to the point that they will be able to function as an independent Pediatric Orthopaedist. The first step is to ensure that they acquire basic knowledge of pathophysiology and pathoanatomy of pediatric orthopaedic conditions. The second phase is to help them develop their problem-solving skills in regards to patients. The emphasis is on the process, rather than particular cookbook solutions to problems. We have a diverse staff, which ensures a spectrum of concepts and approaches to treatment and the Fellow is encouraged to recognize that there are, in most conditions, several approaches to treatment.

Fellows will be exposed to a large volume of secondary and tertiary pediatric orthopaedic problems, covering the whole spectrum of elective pediatric orthopaedic practice. Extensive exposure to diagnosis and treatment, including the latest techniques of spinal deformities, pediatric neuromuscular disorders, skeletal dysplasia, limb deficiencies, hip and foot disorders, upper extremity disorders and musculoskeletal oncology can be anticipated. There is a full automated gait analysis laboratory, which provides clinical studies on all appropriate patients. There is a strong clinical research program as well as a 50-member basic science institute with focus on connective tissue.

The goals of the fellowship are:

- 1) Upon completion of the program, the fellow will be competent in evaluating and treating a multitude of pediatric orthopaedic problems.
- 2) Fellow will have training and supervision in surgical technique.
- 3) Fellow will be comfortable in formulating various post-injury and post-operative rehabilitation plans.
- 4) Fellow will have had an extensive opportunity to improve and develop his skills in lecturing, teaching, research and publication.

## **Educational Objectives:**

**Patient Care:** This program will familiarize the pediatric fellow with basic concepts of orthopaedic conditions and treatment methods that are unique to the pediatric population, providing the widest variety of clinical cases. Fellows will become proficient in the care of pediatric orthopaedic patients, refining clinical acumen and surgical skills in pediatric orthopaedic procedures. The primary education method is a direct preceptorship with the pediatric orthopaedic faculty. Under faculty supervision and with one-on-one instruction, fellow will become more accomplished in the development and implementation of treatment plans, initiating diagnostic and therapeutic interventions, as well as pre-and post- treatment care of pediatric patients. Fellows have computer access to patient records and imaging studies to aid in patient care discussions. The pediatric fellows are regarded as adjuncts to the faculty rather than "extra" residents. They assist the faculty in instruction and supervision of residents. The number of pediatric orthopaedic surgical cases is such that the fellow and resident are assured adequate surgical experience.

**Medical Knowledge:** To ensure that the pediatric fellow remains knowledgeable in the evolving biomedical, clinical and associated sciences, didactic lectures, discussion groups, and surgical skills workshops (using anatomic or animal models) are held. Pediatric and other orthopaedic faculty members, visiting lecturers, and residents regularly present lectures, and at the Beattie and Dillehunt Lectures in the Spring and Fall. Journal Club provides opportunities for reading and analysis of the current literature. In addition, the Fellow is strongly encouraged to attend the International Pediatric Orthopedic Symposium (IPOS) and the Pediatric Orthopaedic Society of North America (POSNA). The Fellow will also provide didactic instruction, presenting lectures on appropriate topics and leading discussion sessions at Indications Conference. They are required to participate in clinical or basic science research. Computer access, clinical research lab, motion analysis lab and library resources are all available for the fellow to complete a research project. It is important to start the process early so that there is adequate time to complete your project(s). There is protected time each week to work on research. POSNA has partnered with Orthobullets to provide a yearlong education outline.

**Practice-Based Learning and Improvement:** Clinical teaching and clinical experiences reinforce the application of medical knowledge to patient care. Fellows are encouraged to continually review the literature, a practice that is reinforced by encouraging participation in Journal Club and Indications Conference.

**Interpersonal and Communication Skills:** Fellows develop their communication skills by observing the interaction of staff members with patients, other staff members, and personnel. In addition, at least one didactic lecture a year that reviews verbal and nonverbal communication skills is given.

**Professionalism:** The goal of the fellowship in this category is to enhance the personal ethics and value systems of the fellows. The fellows are required to complete an educational module on "Understanding Cultural, Ethnic & Religious Differences" as part of their orientation. The best

method of encouraging professionalism is by role-modeling. Daily observation of honesty, responsibility, and integrity, sets the standard for acceptable behavior.

## **Educational Objectives Continued:**

**Systems-Based Practice:** Raising the awareness of fellows about the interdependencies within the health care system is an integral part of their training. Coding methods as well as meticulous record keeping, compliance with HIPPA regulations on patient confidentiality and JCO guidelines for patient safety mechanisms are discussed at departmental meetings and appropriate lectures are given. Each fellow completes a computer-based instructional module and test on Institutional Review Board principles and requirements for research. Once a month mortality and morbidity are discussed the third Thursday every month at our Medical Executive Committee Meeting. These methods of instruction provide the fellows with information to enhance their role as patient advocates.

**Evaluation of the Pediatric Fellow:** Evaluation of the Pediatric Orthopaedic Fellow is primarily through faculty observation of the fellow's progress. Semi-annual evaluations are submitted to the teaching faculty members and include evaluation of skills in basic science, clinical orthopaedics, information gathering, problem solving, clinical judgment, and surgical techniques, relating to peers, and colleagues, as well as evaluation of responsibility, moral and ethical values, and overall competencies.

**Trauma Experience:** The Fellow will take trauma call at Providence 1 night per week and 1 weekend per month. The Fellow will participate in Fracture Clinic at Shriners Hospitals for Children on the days the Fellow is not operating from 7-9 AM. The fellow, with consultative and direct supervision by the faculty, is a senior member of the pediatric orthopaedic trauma team and is responsible for determining proper triage procedures, necessity for consultations, selection of appropriate diagnostic procedures, and indications for and timing of orthopaedic surgical procedures. The fellow also provides supervision and instruction and orthopaedic residents who are part of the pediatric trauma team.

**Outpatient clinics:** In outpatient clinics, the pediatric orthopaedic fellow is responsible for examination and evaluation of pediatric orthopaedic patients, formulation and implementation of treatment plans, and follow-up evaluation, under the supervision of pediatric orthopaedic faculty.

**Operating rooms:** Under the supervision of the faculty, fellows develop surgical skills by assisting the attending physician by performing pediatric orthopedic procedures. Your operative experience is divided amongst two teams (Team 1: Primarily Spine and Team 2: Upper and Lower extremity). Fellows are assigned to cases by Dr Krajbich (Team 1) and Dr Bauer (Team 2) based on both your availability and the complexity of the surgeries. Fellows perform/assist in the gamut of pediatric orthopedic surgical procedures with supervision by the attending surgeon. The degree of responsibility is determined by the competence of the individual and it is expected that most cases will be able to be performed primarily by the Fellow. A small amount of stable trauma is treated at the Shriners Hospital as well as trauma treated while on call at St Vincent's Hospital.

## **Specific Responsibilities:**

### **Clinical:**

- Work-up new patients; obtaining history and physician examination data, ordering appropriate x-rays, and discussing management with the attending staff physician.
- Perform all procedures as directed.
- Complete preoperative history and physical examination and ensuring appropriate preoperative x-rays are available.

### **Hospital:**

- Daily rounds on all in-patients.
- Make post-operative check on all patients before discharge.
- Each evening, check on post-operative patients from that day.
- Discuss patient with attending staff physician.
- Communicate with mid-level provider about your patients.

### **Surgery:**

- Serve as first assistant to staff, primary surgeon as directed.
- Oversee post-operative orders and brief operative notes.
- Dictate all operative notes as directed.
- Ensure appropriate x-rays are on the OR PACS.

### **Conferences:**

- Specialty Conference (0700-0800 every Wednesday) attendance is mandatory.
- Journal Club (0700-0800 once a month-Thursday) attendance is mandatory.
- Spine Conference (0730-0900 4th Thursday of every month) attendance is mandatory.
- Motion Analysis Conference (1400-1530 every Thursday) attendance is mandatory.
- Grand Rounds Conference (0800-0900 1<sup>st</sup> Thursday of every month) attends as duties allow and fellow desires.
- Morbidity & Mortality-Medical Executive Committee (0700-0900 3<sup>rd</sup> Thursday of every month attendance is mandatory.

### **Teaching:**

- The Fellow runs the orthopaedic service. Providing the residents with direction where needed.
- The Fellow is responsible for 6 academic lectures over the course of the Fellowship along with preparing for our pre/post operative conference (Indications Conference).

### **Research:**

- Time and facilities are available for clinical and basic science research projects at Shriners Hospitals for Children, Portland. Clinical Research Staff are available to assist with research.
- Fellow is required to work on at least one (1) research project during the fellowship year. It is expected that this research will result in a presentation, or publication or both.

## **Requirements:**

Applicants eligible for this fellowship must have completed an ACGME accredited residency program in orthopaedic surgery, are eligible to obtain DEA certification and limited medical license in the State of Oregon. The fellow will also be required to obtain hospital privileges at Oregon Health & Science University as our affiliated institution with the trauma program.

## **Faculty:**

The Pediatric Fellowship Program Director is **Jeremy P. Bauer, MD**, and is also a member of the pediatric orthopaedic team. He has been on staff since August 2011. Dr. Bauer's focus is on pediatric sports medicine, lower extremity deformities, hip dysplasia and neuromuscular disorders.

The Associate Program Director is **Krister P. Freese, MD** and assists the Program Director with the Educational Portion of our Program and is also a member of the pediatric orthopaedic team. He has been on staff since June 2016. Dr. Freese specializes in pediatric hand and upper extremity conditions, from traumatic injuries to congenital differences.

**Michael Aiona, MD** is Chief of Staff-Medical Staff Department Shriners Hospitals for Children, Portland. Dr. Aiona has been on staff at Shriners Hospitals for Children since July 1986. Dr. Aiona specializes in cerebral palsy, spina bifida, limb length inequality and other neuromuscular conditions.

**Charles R. d'Amato, MD, FRCS(C)** is the Director of Spinal Deformity Program and is also a member of the pediatric orthopaedic team. He has been on staff since May 2003. Dr. d'Amato has a special interest in the non-operative management of scoliosis, early onset scoliosis, Mehta casting, spinal growth modulation and surgery for complex spinal deformity.

**Heather M. Kong, MD** is also a member of the pediatric orthopaedic team. He has been on staff since September 2016. Dr. Kong treats all general pediatric orthopaedic conditions and has a focus on pediatric orthopaedic trauma and lower extremity deformity.

**J. Ivan Krajbich, MD, FRCS(C)** is also member of the pediatric orthopaedic team. He has been on staff since August 1993. Dr. Krajbich's special interests are spine deformity surgery, malignant and benign bone tumors, and lower limb deficiencies.

**Ellen M. Raney, MD** is also a member of the pediatric orthopaedic team. He has been on staff since Dr. Raney's subspecialty interests include cerebral palsy, gait analysis, limb length inequality/deformity, clubfoot and hip dysplasia.

**Dennis R. Roy, MD** is a member of our pediatric orthopaedic team. He has been on staff since December 2002. Dr. Roy specializes in disorders of the neonatal hip to young adult hip. He is a pioneer in arthroscopic surgery of the hip in adolescents and young adults. His other interests involve deformities of the foot and those related to Cerebral Palsy.

**Michael D. Sussman, MD** is also a member of the pediatric orthopaedic team. He has been on staff since October 1991. Dr. Sussman has a special interest and expertise in cerebral palsy, muscular dystrophies, and foot deformities, including clubfoot.

**Michelle C. Welborn, MD** is also a member of the pediatric orthopaedic team. He has been on staff since January 2016. Dr. Welborn's focus is on pediatric spinal deformity with a special interest in the nonoperative management of scoliosis, syndromic scoliosis, early onset scoliosis, congenital scoliosis, Mehta casting, spinal growth modulation, and surgery for complex spinal deformity.

The Fellowship Director establishes appropriate curriculum for the pediatric fellow according to the guidelines of the POSNA. All faculty members are board certified/board eligible in orthopaedic surgery.