

Pediatric Hand and Upper Extremity Fellowship



Pediatric Hand and Upper Extremity Center of Georgia
Children's Healthcare of Atlanta

The Pediatric Hand and Upper Extremity Fellowship Program was established at Scottish Rite Hospital in 2012. The Pediatric Hand and Upper Extremity Fellowship Program is a non-ACGME accredited fellowship. The program offers broad exposure to all facets of pediatric hand surgery. The fellow participates in the entire gamut of educational opportunities including: hand didactic conferences, case presentation conferences, outpatient specialty clinics, outpatient private practice office experience, an abundant volume and array of surgical procedures from all subspecialty areas of pediatric hand.

Educational Program

The goal of the Hand Fellowship Program is to provide exceptional training in the identification, management and treatment of pediatric hand and upper extremity disorders, both operative and non-operative.

The fellow is encouraged to participate in at least one publishable research initiative while on the service and is expected to complete and present their results.

Competency-based Goals and Objectives

Patient Care

It is anticipated that the Hand fellow will assume increasing responsibilities in outpatient, inpatient, operative, and emergency care of pediatric hand patients. The fellow will have exposure to outpatient care both during scheduled participation in private practice clinics with attending staff as well as in mandatory participation in the public hospital based clinics also supervised by attending staff. The fellow is expected to:

- Evaluate all new patients by obtaining a medical history.
- Perform a complete physical examination.
- Assess the radiographic images.
- Propose a treatment and/or workup plan.
- Present a complete clinical picture to the attending physician, who provides further guidance and modification.

PREOPERATIVE/OPERATIVE CARE

With respect to preoperative preparation, the fellow is expected to:

- Review history, physical examination, laboratory examination and appropriate radiographs of all pediatric hand and upper extremity patients undergoing surgery in which he/she will be participating.
- Develop an operative plan, including patient position, incision placement, approach, and plan for treatment. It is expected that the fellow will study and develop this plan prior to the day of surgery.

- If the fellow has questions or desires to discuss the plan with the operating surgeon, he/she is encouraged to contact the attending surgeon directly prior to the procedure in order to obtain direction regarding reading assignments for a particular case.
- Perform preoperative evaluations of all pediatric hand patients (in coordination with the hand residents), including a written note, with review of the history, pertinent physical findings and specific plan.

In the Operating Room, the fellow is expected to:

- Be in the operating room prior to the entry of the patient into the operating room and assist the anesthesiologist with questions regarding the history, questions regarding operative site, and position. In addition, appropriate imaging studies should be located on pacs, disk, or film.
- Participate in the positioning and preparation of the patient for surgery.
- Assist in all the major procedures as directed by the attending surgeon, and expected to perform appropriate level of procedures as supervised by the attending surgeon.
- Write a brief operative note and write postoperative orders as indicated for a specific patient and case after direct consultation with an attending surgeon. These orders should contain specifics regarding use of antibiotics, pain medicine, physical therapy, weight bearing status, rehabilitation, outpatient care, and discharge planning.

INPATIENT CLINICAL CARE

Fellow is expected to:

- Make rounds with the residents and to provide the appropriate attending with an up-to-date status of all patients. Any problems encountered overnight should be reviewed with the covering attending and a treatment plan developed. The fellow will have primary responsibility for all those patients who they may have assisted during their surgical procedures. This primary responsibility requires comprehensive knowledge of the patient's status, knowledge of all laboratory tests, radiographs, and vital signs as well as clinical course.
- Document progress notes in the chart, including data regarding patient's complaints, vital signs, physical examination, lab tests, radiographs, and the patient's status and treatment plan for that day, and subsequent tests to be performed.
- Effectively communicate with the residents, fellows, and attendings. This individual will have the primary responsibility for inpatient care and will be expected to follow through on any ordered tests, to assess the results, and notify the chief resident, fellow, or attending prior to departure at the end of the day. Any pending laboratory tests or radiographs should be signed out to the on call physician.
- Work with pediatricians and pediatric residents in a team fashion.
- Bring any questions or concerns regarding patient care directly to the surgical attending involved.

Medical Knowledge

Through didactic and clinical educational settings, the fellow, at the end of his or her fellowship training, is expected to be well versed and skilled including, but not limited to the following:

- A. Neuropathies
 - Entrapment
 - Carpal tunnel syndrome
 - Mucopolysaccharidoses
 - Cubital tunnel syndrome
 - 1. Traumatic
 - Brachial Plexus Injury
 - Birth Related
 - Traumatic, non birth related
 - Fracture/dislocation
 - Early
 - Late effects
 - 2. Upper Motor Neuron
 - Cerebral Palsy
 - Muscular dystrophy
 - Brain Injury
 - Other upper motor neuropathies
- B. Trauma
 - 1. Fractures
 - Distal radius/ulna
 - Carpals
 - Metacarpals
 - Phalanges
 - 2. Dislocations
 - CMC
 - Interphalangeal
 - 3. Lacerations
 - Tendon
 - Include ruptures like mallets
 - Arteries
 - Nerves
 - 4. Sprains
 - DRUJ
 - Intercarpal
 - MCP and interphalangeal
 - Compartment syndrome and Volkmann's ischemic contracture
 - Fingertip injuries
- C. Infections
 - Soft tissue
 - Osteomyelitis

- Septic Arthritis
 - Issues peculiar to kids (MRSA)
- D. Congenital
1. General
 - Etiology
 - Classification
 - Diagnostic issues
 - Prenatal diagnoses
 2. Conditions
 - Longitudinal deficiencies
 - Radial
 - Hypoplastic thumb
 - Triphalangeal thumb
 - Ulnar
 - Central
 - Cleft hand
 - Phocomelia
 - 3. Transverse deficiencies
 - Congenital amputation
 - Symbrachydactyly
 - 4. Syndactyly
 - Non-syndromal
 - Syndromal
 - Apert's
 - 5. Duplication
 - Polydactyly
 - Pre-axial (split thumb)
 - Post-axial
 - Simple type
 - Complex
 - Central synpolydactyly
 - Ulnar dimelia
 - 6. Kirner's
 - 7. Symphalangism
 - 8. Clinodactyly
 - 9. Camptodactyly
 - 10. Synostoses
 - Radioulnar
 - Intercarpal
 - Metacarpal
 - 11. Macroductyly
 - Hemihypertrophy
 - Syndromal
 - Non-syndromal
 - Distal

- Syndromal
- Non-syndromal
- 12. Amniotic Band Sequence
- 13. Generalized
 - Congenital radial head dislocation
 - Arthrogyrosis
 - Sprengel's deformity
 - Congenital pseudarthroses
 - Clavicle
 - Forearm
 - Madelung's deformity
- E. Tumors
- F. Inflammatory arthritides
- G. Miscellaneous
 - Neurofibromatosis
 - Pediatric trigger digit
 - Epidermolysis bullosa
 - Other

Practice-based Learning and Improvement

With a strong dedication to the practice of evidence based medicine, the Pediatric Hand & Upper Extremity subdivision actively encourages the assimilation of scientific evidence and clinical judgment to provide the best possible clinical care. Upon graduation the fellow will be able to critically analyze available research, then formulate and implement a sound evidence based clinical plan.

The Pediatric Hand Fellowship Program has research resources. The fellow is expected to develop a research project in conjunction with the attending staff. This project is expected to be reasonably complete by the end of the academic year and ready for submission to meetings such as the ASSH and POSNA. In addition a paper should be submitted to a peer reviewed journal. The fellow learns formal research skills by receiving extensive exposure to research methodology, study design, and critical data review, so that he may carry out formal research in their future practice setting. The fellow is encouraged to participate in a second project where he works with one of the residents and assist them through the processes for submission and publication.

Interpersonal and Communication Skills

Due to the interdisciplinary nature of the program, the fellow gains experience in interpersonal and communication skills by working with patients in a team setting of hand surgeons, orthopaedic surgeons, primary care specialists, physiatrists, neurologists, radiologists and physical therapists, occupational therapist, and rehabilitation specialists.

Professionalism

As part of the development of academic pediatric hand surgeons, the fellow is expected to be actively involved in the teaching of orthopaedic residents and medical students during his fellowship. Teaching occurs in the following settings:

- Weekly clinics
- Operating room
- Emergency room call

Systems-based Practice

The fellow gains competence in systems-based practice by preparing for relevant pediatric hand cases. In preparing for cases of the week, the fellow is expected to advocate for quality patient care and optimal patient care systems and participate in identifying systems errors and implementing potential systems solutions. This includes discussing specific equipment needs with the OR nurse who attends pre-op conference and submitting ideas to the attending staff for equipment and procedural system improvements. The fellow is expected to familiarize himself/herself with the attending surgeons' staff to help facilitate and coordinate the planning of pediatric hand operations.

Program Design

Didactic Component

The pediatric hand & upper extremity service has a comprehensive core curriculum. The fellow is expected to attend and contribute to all components of the program, and will be assigned specific lectures and topics to present. All presentations should be carefully researched and presented including a thorough review of all relevant literature.

Expectations

- Take an accurate and thorough history and perform a comprehensive physical examination on all patients seen in the clinic area.
- Develop a differential diagnosis in the clinic based on history, physical examination, and interpretation of radiographic findings, and present this to the attending surgeon.
- Generate an accurate, clear, concise, and comprehensive dictation of the encounter, including chief complaint, history of present illness, medications, allergies, past medical history, past surgical history, assessment of radiographs, and assessment including differential diagnosis and treatment plan.
- Present a concise summary and revisit patients prior to the encounter with the attending surgeon. This will include the date of surgery, the diagnosis, the procedure performed, and the recent history.
- Generate dictation as outlined above. When not visiting a patient individually, the fellow will be expected to observe the attending during his encounter with the patient and be available for discussion following this regarding patient care, management, and instruction.

Delineation of responsibilities for patient care, progressive responsibility for patient management and supervision of residents over the continuum of the program.

The fellow is expected to review the OR schedule at the end of each week and make himself/herself available to maximize his exposure to important surgical cases.

The Hand fellow is expected to:

- Review the office of clinic chart.
- Review the pertinent imaging studies.
- Confirm the H&P's, consents, and discharge summaries as logistically permitted.
- Discuss the relevant cases with the appropriate attending.
- Familiarize himself/herself with the core information on the relevant topic(s). Perform a literature search and read and be prepared to summarize at least one significant relevant article.

In selecting cases, the fellow is expected to insure himself/herself of a broad exposure to all areas of pediatric hand & upper extremity, not just specific areas of their interest. Similarly, providing the residents with a balance experience is expected.

Moonlighting

This is a busy fellowship with a full load of conferences, conference presentations, patient care, case preparation/reading, educational meetings, and research. In order for you to take full advantage this rich learning environment, moonlighting is not permitted.

Fellow Call & Duty Hours

Duty hours are defined as all clinical and academic activities related to the program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities, such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.

On-call activities

In-house call: The fellow does not take in-house call.

At-home call (or pager call)

1. The fellow is expected to take at-home call approximately 1-2 days Monday – Thursday, and two weekends/month. The frequency of at-home call is not subject to the every-third-night, or 24+6 limitation. However at-home call must not be so frequent as to preclude rest and reasonable personal time for the fellow.
2. Fellow taking at-home call must be provided with one day in seven completely free from all educational and clinical responsibilities, averaged over a four-week period.
3. The fellow will serve at an attending level, but always with an attending hand surgeon every night of call.

On a monthly basis, the fellow shall submit to the fellowship director a review of his/her duty assignments and hours worked. Any anticipated or actual violation of duty hours are to be immediately brought to the attention of the relevant orthopaedic attending or the fellowship

director. In his absence, the chief of orthopaedics should be contacted, and if unavailable the orthopaedic attending on call is to be contacted.

Leave Time

Personal Leave Time

The fellow is allowed seventeen (17) business days of personal leave time (vacation, illness, and bereavement) per 12 months. (Days will be pro-rated based on 6 month Fellowship)

- All requests for vacation leave time must be submitted to the fellowship coordinator for review and approval by the fellowship director.
- Vacations in August and July are generally not permitted.

Educational Leave Time

- Children's Healthcare of Atlanta provides funding for one meeting per 6 month rotation, up to \$ 1,000.00.
- Leave time for these are commensurate with those meetings and reasonable travel time as needed up to three (3) days during 6 month rotation
- Additional educational leave should be deducted from personal leave time.
- All requests for educational leave time must be submitted to the fellowship coordinator for review and approval by the fellowship director.

Job Interviews

Clearly one of the goals of this fellowship is to have you obtain a job in pediatric orthopaedic surgery. Each of the faculty is available to aid you in this important mission. Leave time for job interviews should be scheduled with the fellowship director. If more than five (5) business days in total are needed, personal leave time should be used.

Evaluations

At the end of every two months, the fellow is required to make an evaluation appointment with the two attendings (team) with whom they have spent the majority of time. The fellow should review in person their written evaluation, ask all pertinent questions, make written comment if desired, and sign the evaluations. The fellow should complete a faculty evaluation form for each of the team attendings and submit them to the fellowship secretary. At the end of the academic year, the fellow should meet with the fellowship director as well.

Any issues of significance pertaining to evaluations should be brought in person to the fellowship director. If the fellow perceives this response to be inadequate, or if the issue pertains to the fellowship director, the chief or orthopaedics should be contacted personally. If an alternative is still necessary, the Children's Healthcare of Atlanta fellowship coordinator should be contacted.

Faculty

- Allan E. Peljovich, M.D., M.P.H., Medical Director
- Bronier L. Costas, M.D.
- Bryce T. Gillespie, M.D.
- Jeffrey A. Klugman, M.D.
- Gary M. Lourie, M.D.
- Joshua A. Ratner, M.D.