

FELLOWSHIP PROGRAM DESCRIPTION (Updated 04.26.2021)
Nicklaus Children's Hospital Pediatric Neurosurgery Fellowship

A. PROGRAM DEMOGRAPHICS

1. **Name of Host Institution:** Nicklaus Children's Hospital, Nicklaus Children's Health System
2. **Name of Affiliated Institution:** University of Miami
3. **Program Specialty/Subspecialty:** Pediatric Neurosurgery
4. **Program Address (Mailing):** 3100 S.W. 62nd Ave., Ste. 3109, Miami, FL 33155
5. **Program Address (Physical Location):** same as mailing address
6. **Program Phone Number:** 305-662-8386
7. **Program Fax Number:** 305-663-8490
8. **Fellowship Program Director E-mail:** john.ragheb2@nicklaushealth.org
9. **Fellowship Program Director:** John Ragheb, MD
10. **Division Program Director:** John Ragheb, M.D.
11. **Alternate Program Contact:** Kari Bollerman, Physician Coordinator;
kari.bollerman@nicklaushealth.org

B. INTRODUCTION

1. **History:** The Pediatric Neurosurgery Fellowship Program has been in existence since 2003. Since its inception, 15 neurosurgeons have completed the training program.
2. **Duration:** A Pediatric Neurosurgery Fellowship is a postgraduate position of 12 months duration.
3. **Prerequisite Training/Selection Criteria:** Prior to beginning a Fellowship in pediatric neurosurgery, applicants should have satisfactorily completed an ACGME-accredited residency training program in neurological surgery (or the Canadian equivalent), or have completed an equivalent neurological surgery program abroad and have a valid ECFMG Certificate and meet the hospital's employment requirements, including valid visa and work permits when necessary and current valid certification of pediatric basic and advanced life support.
4. **Goals and Objectives for Training:**

The goal of the Pediatric Neurosurgical Fellowship is to provide graduates of accredited neurosurgical training programs with the training and skills to evaluate and treat surgical diseases of the developing nervous system.

The objectives of the training program include:

 - Competence in the neurologic exam of the infant and developing child.
 - Understanding of the relevant physiology of the infant and child.
 - Competence in the proper evaluation of diseases of the nervous system, including the ordering of appropriate tests and seeking of appropriate outside consultation when necessary. A thorough understanding of the preoperative evaluation of children considered for surgical treatment of the complete spectrum of neurologic diseases of childhood (i.e. epilepsy, spasticity, craniofacial reconstruction, brachial plexus repair, management of occult dysraphism, etc.) will be expected.

- Capable of the complete preoperative and postoperative management of infants and children, as well as the surgical and nonsurgical management of traumatic brain injury.
- Acquire the surgical skills necessary to operate on the developing nervous system, to a level deemed safe by the Pediatric Neurosurgical Attending Physicians.

5. Program Certifications: This Fellowship is accredited by the Accreditation Council of Pediatric Neurosurgery Fellowships (ACPNF) and qualifies the otherwise eligible applicants to pursue certification by the American Board of Pediatric Neurological Surgery (ABPNS).

C. RESOURCES

1. Teaching Staff

The teaching staff include:

Division Director and Fellowship Program Director, John Ragheb, M.D., F.A.C.S., F.A.A.P.

Toba Niazi, M.D., FAANS, F.A.A.P.

Shelly Wang, MD, MPH

Glenn Morrison, M.D., F.A.C.S., F.A.A.P.

Gregory Hornig, MD

Heather McCrea, M.D.

2. Facilities:

Training sites will include primarily Nicklaus Children's Hospital and Jackson Memorial Hospital.

D. EDUCATIONAL PROGRAM – BASIC CURRICULUM:

1. Clinical and Research Components:

The Fellow will be encouraged strongly to participate in clinical research. There are opportunities in neuro-oncology, epilepsy surgery, craniofacial surgery, Chiari malformations, as well as general pediatric neurosurgery. The Fellow is responsible for initiating a clinical and/or basic science project during his/her rotation on the service. The Fellow will also be encouraged to complete at least one significant clinical study to be submitted in a scientific or reference journal for publication. In addition, the Fellow may be asked to write book chapters in conjunction with the Faculty.

2. Participant's Supervisory and Patient Care Responsibilities:

Under the direct supervision of the Pediatric Neurosurgical Teaching Faculty, the Fellow will assume increasing levels of responsibility for outpatient, inpatient, and operative management of patients. Surgical responsibilities will evolve as competence is demonstrated, and the Fellow will be expected to ultimately take on a supervisory role to oversee the Senior Neurosurgical Resident(s) on the Pediatric Service. The Fellow should be in attendance to neurosurgical Grand Rounds and pediatric conferences. The Fellow is encouraged to attend at least one major Pediatric Neurosurgical Meeting during his/her year of fellowship.

The Fellow will work with the Pediatric Neurosurgery Teaching Faculty to participate in all aspects of pediatric neurosurgical care at Nicklaus Children's Hospital and Jackson Memorial Hospital. In addition, the Fellow will work along with and provide supervision for the senior

resident(s) assigned to the Pediatric Neurosurgery Service. As a member of the Pediatric Neurosurgical Team, the Fellow will provide inpatient care to evaluate, diagnose, and treat children with surgically-treatable disorders of the central and peripheral nervous systems. In conjunction with the Attending and Senior Resident, the Fellow is responsible for organizing daily rounds. The Fellow will make hospital rounds daily on the inpatient and consult service, along with the Neurosurgery Resident, Pediatric Neurosurgical Nurse Practitioners, and Teaching Faculty Neurosurgeons. The Fellow will provide emergency room and inpatient consultations as necessary and oversee the consultations of the neurosurgical residents, all under the supervision of the Teaching Faculty Physician. All consults will be reviewed by an Attending Pediatric Neurosurgeon. The Fellow will conduct an outpatient clinic weekly to evaluate new patients, and follow patients after surgery, as well as participate in the multidisciplinary epilepsy, spasticity, neuro-oncology and neural tube defect clinics.

The Fellow will enhance the Resident's experience in the operating room and will assist, teach, and perform surgery in conjunction with the Pediatric Neurosurgery Resident under the supervision of the teaching faculty. Surgical cases will be shared with the Resident as the Fellow's level of ability and experience increases as deemed appropriate by the Teaching Faculty. Night call will be shared with the Resident and/or Attending Faculty as the Fellow's level of ability and experience evolves. When the Resident is sick or on vacation, the Fellow will fill in for him or her.

The purpose and stated goal of the Fellowship is to develop diagnostic and therapeutic skills of the candidate such that he/she is able to compete for top academic positions and perform as a leader in pediatric neurological surgery both nationally and internationally.

3. Procedural Requirements: The Fellow must abide by the policies and procedures set forth by Nicklaus Children's Hospital.

4. Didactic Components:

- a. Grand Rounds (1x per week)
- b. Radiology Conference (1x per week)
- c. Neuro-Radiology Conference (2x per week)
- d. Epilepsy Conference (1x per week)
- e. Neuro-Oncology Mtg (1x per week)
- f. Daily rounds
- g. Journal club (2x per month)
- h. Epilepsy Clinic (1x per month)
- i. Spasticity Clinic (1x per month)
- j. Neuro-Oncology Clinic (1x per month)
- k. Neural Tube Defect Clinic (1x per month)
- l. Tumor Board (1x per month)
- m. Spine Conference (1x per month)

E. EVALUATION

Working closely with the Attending Physicians on a day-to-day basis, there is ongoing feedback in terms of performance of the Fellow. In addition, we have formal evaluations of the Fellow by the Faculty. There is also a faculty evaluation completed by the Fellow for all faculty involved in the program.