Specialty / Field Questions

1. A) What are the best things about your specialty?

- Working with children
- Numerous opportunities for academic positions in Canada (clinical work, teaching, and research)
- Always interesting and challenging
- Great advances in our understanding of the brain and brain function with increasing opportunities for treatment (e.g. epilepsy, migraine, and neuromuscular disorders)
- the progress in understanding brain function, the neurosciences and genetics
- the ability to follow up children for longer periods of time
- the ability to help families coping with neurological disorders
- our role in education and disease prevention

B) What are the worst things about your specialty?

- One of our pediatric neurologists wrote, “Some sick children do not recover and may suffer.”
- One of our pediatric neurologists wrote, “...dealing with many incurable disorders”

2. Why did you choose your specialty?

- One of our pediatric neurologists wrote, “I was intrigued by the brain and the impact of some disorders on development”
- One of our pediatric neurologists wrote, “I found seizures and epilepsy interesting and I wanted to do more to learn about them and treat them”
- One of our pediatric neurologists wrote, “I felt that I could have a major impact on how a child develops and on how the family can cope with a neurological disorder. I wanted to make both the patient and the family more empowered.”
- One of our pediatric neurologists wrote, “Fascination with the neurosciences through summer research experience.”

3. What types of clinical cases do you commonly see?

- One of our pediatric neurologists listed the following:
  - Migraine
Movement disorders (e.g. dystonia, chorea)
Neurocutaneous disorders (e.g. neurofibromatosis, tuberous sclerosis)
Developmental delay
Cerebral Palsy

One of our pediatric neurologists wrote,

Neurometabolic disorders
ADHD
Learning disabilities
Mental Retardation
Autism

One of our pediatric neurologists wrote, “As I subspecialize in pediatric epilepsy, I see predominantly children with seizures or suspected seizures. In particular, I evaluate children for epilepsy surgery. Some of my patients are admitted in hospital for video-EEG. Other patients undergo evaluation with intracranial electrodes.”

4. Briefly describe a typical day.

One of our pediatric neurologists listed the following:

Mornings are for inpatient rounds, office work and reading EEGs.
Two mornings per week I see patients in the Ambulatory Clinic.
On some weeks (1 per month) I am “on service” meaning I see all the new Pediatric Neurology consults in the hospital with the help of the resident(s) and medical student(s). On these weeks my mornings are spent rounding with the team and teaching in the afternoon.
The other afternoons I work on my research projects.
I also teach in the Medical School on some days and I frequently teach residents when they attend my clinics or when I am on service.

5. A) What are the varieties of lifestyles within your field?

Most Pediatric Neurologists in Canada have an academic position (i.e. associated with a University) so have multiple varying responsibilities: inpatient and ambulatory care, teaching, research, and administrative duties.

Most practice in a group with shared call responsibilities. Call is often from home i.e., do not need to be in hospital overnight.

Lifestyles are generally favorable.

B) Specifically, how able is your specialty to accommodate family life?

One of our pediatric neurologists wrote, “I have two children and I have found my specialty to be one of the most accommodating for a family life. Training (no matter what the program) is challenging; however, on-call requirements are generally less demanding in Pediatric Neurology as compared to other pediatric subspecialties.”
6. Range of incomes?

- This is highly variable, depending on type of practice, but varies from $150,000 to $300,000.

7. How do you see your discipline changing over the next decade?

- Our ability to treat common and rare conditions (that we currently struggle with) will continually improve.
- Advancements in diagnostic tools (e.g. neuroimaging, genetics), will make assessment of the brain and its functioning more accessible.
- Pediatric Neurologists will be increasingly involved in the research and development of diagnostic tools and medical therapies.
- I believe that by the next decade genetic prenatal diagnosis will enable early diagnosis of babies with severe neurodegenerative/metabolic disorders. In addition, there may be possibilities to match specific drugs or treatments (such as anti-epileptic medications) to the genetic profile of the patient.

Residency Program Questions

1. A) What are you looking for specifically in an impressive candidate?

- Well-spoken and ambitious
- Keen learner
- Gentle and conscientious with children
- Decisive
- Interest in the Neurosciences (through clinical electives, research experience or past employment)
- Research experience and publications are a definite asset
- Excellent evaluations from clinical preceptors demonstrating the above qualities

B) What can a potential candidate do now in order to be an appealing applicant to your program?

- Electives in pediatric neurology
- Research projects with Divisional members
- Research in the Neurosciences
2. How is your residency program organized? (i.e. year by year breakdown and schedule of rotations)

- Year 1 is spent in Pediatrics with both general and subspecialty rotations (e.g. CTU, Cardiology, NICU/PICU). No more than six months of this time can be spent in Pediatric Neurology.

- The next four years are the core neurology years with 12 months of Pediatric Neurology and 6 months of Adult Neurology. Other rotations include Neuroimaging, Neurophysiology (e.g. EEG, EMG), and Neuropathology (usually in the final year).

- The final year is flexible and may be spent doing research (6 months), pursuing a subspecialty area of interest (e.g. epilepsy, neuromuscular, neonatal neurology, etc), or broadening consultation skills through ambulatory clinics and inpatient service in preparation for the Royal College Examination.

3. What is your residency program’s orientation and focus?

- We are focused on training talented, bright, ambitious people to perform with excellence as a clinical Pediatric Neurologist.

- In addition, we hope to foster “niche” interests for trainees whether it be research, a clinical subspecialty, or skill as a General Pediatric Neurologist.

- We also try to develop skills for lifelong learning, professionalism, ethical practice, and critical appraisal.

4. What is the availability of experiences in subspecialty areas during training?

- Students are always welcome for elective experiences.

- Students may approach divisional members to become involved in ongoing research projects.

5. Are there sufficient elective opportunities during training to explore your special interests?

- Absolutely! The program is very flexible in that regard and can be tailored to a resident’s specific areas of interest.

6. What is the on-call schedule during each year of residency?

- The resident takes home-call up to nine per month including one weekend per month (Fri-Sun) and up to six week-days.
Residents come into on weekends to round on patients and may at times be asked to see a patient in hospital in the evening or night.

7. What distinguishes the U of A program from other programs?

- We are a relatively new program and thus the teaching curriculum, structure of the program, etc... has had a lot of input from residents, established programs, and active staff.
- We have a special emphasis on clinical research as well as opportunities in basic research.
- Strong teaching in neuropathology and neuroradiology.
- Strong and collegial relationship with both the Adult Neurology program and General Pediatrics.
- Interdisciplinary Neuroscience Rounds.
- Excellent teaching in neuroscience and neuroanatomy in the Academic Half-day.

8. A) Who can we contact for more information or to set up electives?

- **Residency Training Program**
  Phone: 780-248-5543
  E-mail: pedsneuro@ualberta.ca

- **Electives**
  Undergraduate & PGY1 Administrative Assistant
  Phone: 780-248-5541
  E-mail: ugpeds@ualberta.ca

- If you wish to shadow a pediatric neurologist for a day, please contact us and we will make arrangements to accommodate you:
  E-mail: pedsneuro@ualberta.ca

B) Specifically, is there a list of residents whom we can call or email?

- Dr. Natalia Liapounova, Chief Resident
  E-mail: liapouno@ualberta.ca

9. How competitive is it to get in, and then to succeed in your field?

- Pediatric Neurology is a rapidly growing and hence, increasingly competitive field. However, we are always looking for bright, energetic individuals to join us in this immensely stimulating and rewarding field!
- The opportunities for professional success are limited only by an individual’s ambition and imagination!
10. **A) Is there active and/or required research in your residency program?**

- There are clinical and basic science research projects being carried out by all divisional members.
- There is a research requirement for all pediatric neurology trainees across Canada.
- As well, there is a research methodology and critical appraisal course incorporated into the neurology resident half-day in collaboration with the General Pediatric program.

**B) What role does research play in your career?**

- Since most pediatric neurologists practice in the academic arena, involvement in either basic or clinical research is important; however, as seen in the US, there are growing numbers of community pediatric neurologists across Canada and the previous trend of having research as part of the career is lessening.

11. **What local, national or international conferences would be of benefit to candidates interested in your residency program?**

- Attendance at the annual meetings of any of the following groups might help to foster an interest in the pediatric neurosciences:
  - Canadian Neurological Sciences Federation
  - Child Neurology Society
  - American Academy of Neurology