

Dr. Thalia Field

Stroke Neurology

Overview

1. **Profile:**
 - a. **Positions:** Stroke Neurologist (Vancouver Coastal Health); Associate Professor (UBC); Program Director (Postgraduate Stroke Fellowship at Vancouver Stroke Program)
 - b. **Training:** MD (Dalhousie); Adult Neurology Residency (UBC); Stroke, Vascular Neurology, and Clinical Trials Fellowships (UBC and Calgary); Masters of Science in Clinical Epidemiology (UBC)
 - c. **Projects:** Principal investigator on many clinical trials (Study of Rivaroxaban for CeREbral Venous Thrombosis- SECRET), leader in education
2. **Pitch:** Very satisfying- you get to make many complex and interesting decisions and diagnoses as well as develop long-term relationships with patients.
3. **Path:** She came from a family of physicians and was set on stroke neurology after an exciting summer research project. She still loves it twenty years later!
4. **Personal:** Many patients have great recovery and amazing outcomes after neurological procedures but the burden of invisible disability cannot be overlooked.
5. **Philosophy:** Be curious and get as much exposure to different specialties as you can. Don't let one bad experience put you off from what could be a rewarding career!

Elevator Pitch

(1:45)

- ***"I still enjoy what I do 20 years later!"***
- You get a lot of different satisfying elements- high stakes fast clinical decision making in acute setting, deal with medically interesting people and answer diagnostic questions on ward
- Also develop broad relationship with patients over their treatment journey

Personality

(2:43)

- She's on the **least detail oriented** spectrum of neurology- she enjoys making **quick decisions** with short amount of data, she continues to learn about new treatments with **multidisciplinary** team (pharmacist, med residents, rehab residents, neurology residents)
- She also likes supporting and informing patients and loved ones at a time of trauma and open questions and encouraging them in their successes
- She plays the roles of decision maker, learner, and patient advocate

Medical students' perception of neurology

(4:00)

- Idea that neurologists are brainy, detail oriented, often bow-tie clad men with complicated patient population that doesn't have many treatment options
- Australian med students thought rural family med is associated with feelings of isolation
- Dr. Field's response:
 - There are detail-oriented bow-tie clad men (10-15% of American College of Neurologists) but they're just really interested by the brain
 - When Dr. Field went into neurology, she wanted to be stroke person but she loved how fascinating all of neurology was (movement disorders, neuromuscular disorders, epilepsy)- fascinating the manifestations you get from disease that affects who you are and how you function in world (molecular, anatomical, personality, psychosocial)
 - She loved the patients and even studying for exams! (even though she won't use all this info later)
 - She's quite upset at the old-school "diagnose, then adios" stereotype
 - Stroke is third leading cause of death and it's treatable
 - Development of treatments for other disorders like epilepsy, spinal muscular atrophy, even ALS
 - Also non-motor manifestations of diseases like MS, Parkinson's stroke and good neurologist will be attentive and listen to patient to improve their quality of life, even supporting + informing family is much appreciated
 - Neurology can sometimes be taught as this isolated thing but if you start thinking systemically, you can appreciate the neurology in other disorders
 - "There's a lot you can do as a neurologist even if the disease isn't curable"

Referenced Material: Jordan et al. Attracting Neurology's next generation: a qualitative study of specialty choice and perceptions. *Neurology* 2020 Aug 25;95(8):e1080-e1090.

Path

(9:41)

- She comes from a family of physicians and didn't think she could do anything else (she wasn't too excited about what her dad and cousins were doing so she ended up going into geology for undergrad)
- She realized geology just wasn't her thing so she applied to summer research programs in medicine and got job with stroke team
 - It was super exciting! (tPA had recently been introduced to break down clots in stroke)
 - Her mentor Dr. Michael Hill was fabulous- he would take her not only to the research setting but also to see patients who could now move after tPA therapy
- She briefly considered neurosurgery in med school but she couldn't see herself as the most responsible surgeon so she stuck with adult stroke neurology
- Pediatric hospitals are a whole different setting and she didn't think she could handle the extra stress and emotional stakes in a child (even worse than in adults)
 - But children do tend to recover neurologically more often and satisfying to see them in follow-up
- She never imagined research not being major part of career (clinical trials and research have shaped standard of care and treatments for stroke)
 - There are still so many unanswered questions for future trials so seamless integration between clinical practice and research!
- There were many specialties she didn't even know about until residency (hematopathology, specialties where you don't have to get up in the middle of night for call!)
 - Find out about the specialties they're not telling you about (radiation oncology, lab medicine, etc. that aren't part of typical rotations)

- Acknowledge that you may get tired, you don't really know how much paperwork and admin work there is until you finish residency, get early sense whether you like clinic or hospital setting
 - Residency is temporary and the rest of your career is very long!

Day-to-Day Life

(18:08)

- Schedule depends if she's on service or not
- When she's on the **wards** as the on-call neurologist, she meets with team, goes over imaging and difficult patient questions, what needs to be done for workup, talk to families
 - Generally 8-5 but maybe more if on call or need to be there at night
- If she's on **consult** service, she makes a lot of advice calls, check imaging and make decisions from far, decide if patient needs to be transferred
 - Now more involved in recruitment so less service (12 weeks now)
- If she's in **clinic**, she's either seeing patients who were admitted for follow-up or seeing people who had spell that may be TIA or minor stroke
 - ½ day clinic a week when not on service and when on service, on call from Friday morning till following Friday morning (someone covers Mon, Tues, Wed 5-7)
- If it's her **research** time (majority of her work), lot of meetings, communications with team, paperwork, meeting trainees, writing grants, looking at data, answering many emails
- **On call at night:**
 - She'll get pre-notification about someone with stroke symptoms being brought in by paramedics
 - She can ask anyone but a very junior trainee to take a look and see if she needs to come in to give acute treatment (thrombolysis or thrombectomy)
 - Rush in, get basic facts quickly, do imaging and make treatment decisions (discuss case with neural interventionist, anesthetist so can do treatment ASAP)
 - Then she's there watching the thrombectomy procedure, examining patient after, talking to family after, and instructing team who looks after patient overnight
- She really enjoys her clinical work (discussing with patients and families, providing life-saving treatment, teaching trainees) as long as she's not overwhelmed
- Med students don't often get to see longitudinal relationship you can build with patients
- Neurology in general can vary with practice setting (office setting with mostly benign or stable patients vs hospital setting with new diagnoses and more severely ill patients)

Research:

(27:00)

- She has 3 main projects currently- the SECRET trial, one looking at covert stroke and cognitive decline in adult congenital heart disease population, and another one looking at machine learning-mediated analysis of eye movements and speech as adjunctive cognitive test or risk-stratification for clinical trials in people with early stage neurological disorders
- SECRET trial took 5 years to launch so very satisfying that it's now up and running
 - Looking at treatment strategies for cerebral venous thrombosis, which is rare type of stroke that primarily affects younger women (1% of all strokes)
 - Hard to engage in evidence-based research as condition is very rare and outcomes for thrombosis (recurrence, major bleeding, death) are uncommon in younger, healthy people
 - Patient forum and patient engagement core to identify outcomes and impact in international research for outcome measurement
- You can see the impact of the type of inquiry you're doing as it's going on and it's incredibly exciting as it's been shaped with patient partnership
- The research is also really collaborative and takes place around the country
- The true secret to maintaining clinical-research balance is doing a lot of recruitment of trainees!
 - COVID has actually made balance easier b/c she can do most meetings online and travels less!

Personal Takeaways

(24:20)

Personal Story:

*You don't really get the benefit of long term follow-up when training, so my eyes were really open during my rehabilitation rotation as a resident, that people get better. Seeing a patient with a devastating and very disabling stroke a couple of months later when they've regained so much movement and language and can get on with their lives was a **huge revelation** to me. There's always a role for **cautious optimism**. On the flip side, I had treated this young woman early on in my career who had devastating proximal right MCA clot- we did a thrombectomy and she was totally back to normal. During follow-up, all she could tell me was that she had terrible post-stroke fatigue, pain, and other*

*invisible things that interfered with her home and work life. It was a **huge eye-opener** for me in terms of the **burden of invisible disability** in young people. It really demonstrated that there's so much we can continue to work on to make people better. It's also driven my research work- how we characterize hard to measure outcomes (current scale doesn't capture the other important factors). It's given me a wonderful opportunity to partner with patients as a researcher.*

Takeaway: Patients can have incredible outcomes after neurological procedures but characterizing and addressing adverse effects is very important- there is still a lot we can do as clinicians and researchers to help patients.

Note: While we tried to keep these transcriptions as true to the speaker as possible, some dialogue is paraphrased and/or edited for easier reading.

Final Comments

(33:57)

- Don't let a bad initial experience turn you away from a specialty- it can still be a very satisfying career!
- Ask lots of questions and get as much exposure as possible.