

the HAMMER

Winter 2015

Life After Residency with Nicole Everman, MD



migraine, movement disorders and multiple sclerosis. I have remarried and have a 12-year-old daughter and 5-year-old stepdaughter. With time management, I am able to have a busy practice but still have time to be with my family and attend their many activities.

What is your work life like?

I work a four-and-a-half-day week in a general neurology practice with four partners and a nurse practitioner. I have a one day/week Botulinum toxin clinic and perform EEGs, EMGs, SPG blocks and occipital nerve blocks as well. I tend to work from 8:00 a.m. to 4:30 p.m. most days. I still participate in hospital call on a limited basis, averaging six weekends a year.

What things would you have done differently during residency?

I would have participated in more research as a resident for experience. I am active in research now and would of liked to have had more experience before becoming an attending.

Any advice for current trainees?

Make sure you get exposed to as much research, procedures and the different sub-specialties as much as possible as a resident. Spend your clinic time wisely with the different attendings one-on-one; their knowledge is an advantage for you when you're out on your own. Talk to as many neurologists as you can in different positions (hospitalists vs. clinicians, academic vs. private) so you can make the best choice for your lifestyle. Do not be afraid to ask questions and learn; that is what residency is about. You cannot ask too many questions or read enough as a resident! And learning is lifelong as a physician, so stay updated and attend conferences. Value your family time and take a break from work to be with your family when possible. And last, learn coding, billing, contract negotiations, etc. as a resident. No matter what setting you work in, you are a businesswoman (businessman) and you need to know how to protect yourself financially.

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How has life and work been since graduating from University of Kentucky?

I am very happy with how things have turned out since residency. I was in private practice for four years and have worked for KY One Health Neurology the last one and a half years. I am a general neurologist but have been able to tailor my practice to what I enjoy treating most, which is

Program Director Earns National Award

Adapted from Laura Dawahare, Hannah Marous. To read the original article, please visit: uknow.uky.edu/content/smith-receives-education-award-develop-simulation-program-neurology-residents

The American Board of Psychiatry and Neurology (ABPN) has named Dr. Jonathan H. Smith of the University of Kentucky a recipient of its Faculty Innovation in Education award to support the development of innovative education projects that provide effective residency and fellowship training, as well as lifelong learning for practicing psychiatrists and neurologists. Every year up to two neurologists are selected for this prestigious award. The two-year award provides a maximum of \$100,000.

Who has anxiety? All of us.

Written by Kathryn Dunham, PsyD, Neuropsychology Fellow

Anxiety, and more specifically the autonomic fear response, is an adaptive response that dates back to the prehistoric era. This response helped our ancestors survive in dangerous situations. Of course, this can lead to problems when our autonomic system becomes dysregulated and responds excessively at inopportune times; for example, when giving presentations, studying for board exams, or preparing fellowship applications. Ideal doses of anxiety can be beneficial for performance, but high levels of anxiety can negatively affect your abilities (research the Yerkes-Dodson model for more information). Fortunately, there are some quick tips you can use when you notice an increase in your anxiety levels!

- Try diaphragmatic breathing – This is a controlled breathing exercise aimed at increasing your parasympathetic nervous system response. The basic principle is to slowly inhale and exhale using your diaphragm (try slowly counting to 3 during both the inhale and exhale). Imagery can be helpful during this process. I like to imagine that my stomach is a balloon, and I am trying to fill it completely on the inhale and completely deflate it on an exhale. Another option is to imagine your legs are straws, and you are taking in and pushing our air through your feet.
- Take a mini-vacation in your mind – Guided imagery is an evidence-based strategy that can help evoke a parasympathetic response. This principle is best started prior to a time of high anxiety. You start by identifying a physical location from your past that is particularly relaxing or enjoyable for you. Then, build the memory of that location by identifying the various sensations associated with that location (e.g., What sounds are there? How does it smell? Is it warm or cold? Who is there with you? What time of day is it?). The more detailed you can make the location in your mind, the stronger the relaxation response will be. Once you have a very strong vacation spot in your mind, you can take yourself there for a few moments when you notice the peak of your anxiety. Spend time reminding yourself of all the sensations you formed earlier. If you notice thoughts of your current stressor, gently push it out of your spot and remind yourself you are on a mini-vacation for a few moments.
- Regular exercise – You are very busy! However, exercise is important for both your physical (as you know) and mental health. Taking a few moments for physical exercise when you are feeling anxious can be really helpful. This is especially true if you engage in physical activity that requires a social component (e.g. playing basketball instead of going for a run by yourself or walking with someone versus going alone). Distracting yourself from the source of your stress for a short period of time can help provide a new perspective on your approach and possible change your strategy for successfully completing the stressful task.

These strategies can be combined together for even greater relief from particularly high stress situations. It is important to practice these strategies when you are not feeling stress. This will help to bolster your skills so you have already mastered them when you need relief from the strategy. I hope these tips on combating anxiety will help you as you go through your training!

Beyond the hammer is a reflex!

Written by Abdullah Al Sawaf, MD, PGY 4 & Chief Resident

Today's common understanding of the "reflex" has had quite the journey. René Descartes and Thomas Willis conceived primitive notions of reflex activity. To Descartes, the human body was a machine, controlled by the soul located in the pineal body. However, Marshall Hall introduced the noun "reflex" as it is understood presently as a stereotyped, unlearned, involuntary motor response to a stimulus.

Plantar Reflex/Babinski Sign

In the late 1800s, Joseph Babinski helped develop the neurologic examination as we know it today through the discovery of the plantar reflex also known as the Babinski sign. At the meeting of the Societe de Biologie in 1896, Babinski presented this phenomenon. He observed that the "paralyzed" foot of patients reacted differently to a pinprick from how the "normal" foot reacted. Pinpricking a "paralyzed" foot resulted in the big toe extending upwards and backwards with the four toes fanning outwards whereas pinpricking the "normal" foot resulted in all of the toes bending downwards. While

cutaneous reflexes were known prior to this, Babinski was the first to highlight the significance of the extension of the big toe in such examinations. As a result, the Babinski sign became a reliable indication of a pyramidal disorder.

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When testing for the Babinski sign, physicians observe how the big toe and four toes react to a stimulus to the plantar foot. If the big toe extends outwards and upwards and the four toes fan out, the Babinski sign is present and damage to the central nervous system exists. A caveat: this type of reflex is normal for children up until the age of two.

How to Test for the Babinski Sign

Have the patient extend and relax their foot over the edge of the exam table. Use the **back edge** of your reflex hammer to stroke the foot from the heel to the toes. Stroke the side of the foot and across the foot looking for movement in the toes.

Case of the Month (December): *Answer & Explanation*

A 41-year-old woman presents with progressive difficulty supporting her head and noting atrophy of her neck muscles. She cannot pinpoint the onset, but the problem has been worsening for at least five years. She has a history of Hodgkin's lymphoma treated with chemotherapy and mantle radiation at least 15 years ago. There has been no evidence for recurrence. She denies constitutional features or additional symptoms. Examination discloses significant cervical paraspinal and sternocleidomastoid atrophy with moderate neck flexor and extensor weakness and mild deltoid, supraspinatus, and infraspinatus weakness. No pyramidal signs were noted. Gait and sensory examination were normal.

Diagnosis/Explanation: The differential diagnosis of progressive cervico-scapular weakness includes disorders localizing to the muscle, neuromuscular junction and motor nerves. The absence of pyramidal or sensory findings makes spinal cord an unlikely localization. As several of you correctly reported, this syndrome has been reported to occur 5-30 years after receipt of mantle irradiation for Hodgkin disease as was the case with our patient. The weak muscles are in the prior radiation field. The electrophysiologic findings may be myopathic, neurogenic or mixed. Authors have noted that myositis is a rare adverse event after radiation therapy. This, along with the delayed presentations, has led to speculation that the pathophysiology involves proliferation of fibrous tissue, in the setting of microvascular injury, which may be delayed and progressive.

References: Furby A, et al. JNNP 2010;81(1):1-4; Van Leeuwen-Sejarceanu EM, et al. Int J Radiat Oncol Biol Phys 2012;82(2):612-8.

From the PD's perspective

First and foremost, I want to sincerely thank everyone for making our interview season a success! Each of you are program ambassadors in recruiting the next generation of UK neurology trainees and your future junior colleagues. Additionally, I am excited to announce our permanent complement increase to six residents per year effective July 2016. A special thank you is extended to our Chairman for making this possible. Additionally, here are a few program notes to keep in mind:

- Begin thinking about the semi-annual 1:1 review. Semi-annual reviews will be scheduled after the holidays. Please remember to meet with your faculty mentor semiannually as well and at your convenience.
- It's never too early to prepare for this year's Resident Research Day on June 1, 2016. All PGY-2-4s are expected to submit one abstract, which can range from case report, protocol, preliminary data to a finished project. All PGY-2s should have at least identified a mentor and be planning a project at this point. This is optional for PGY-1 residents but certainly welcomed.
- Please continue to engage our rotating medical students and interns to ensure their experience is more fulfilling and educational. Small gestures go a long way (i.e., showing them an interesting exam finding, giving them feedback, highlighting a teaching point, etc.), and we have all been in their position!
- As discussed at our PD-resident meeting, major program updates include ACGME approval of a program complement increase to six residents per year, transition to a network-based service list, a monthly neurology CPC starting in January, 2016 ("Smith rounds!") and plans for mid-level providers on all hospital services.
- Finally, a safe and happy holidays to everyone! Everyone has worked hard this year, so please enjoy your well-deserved break.



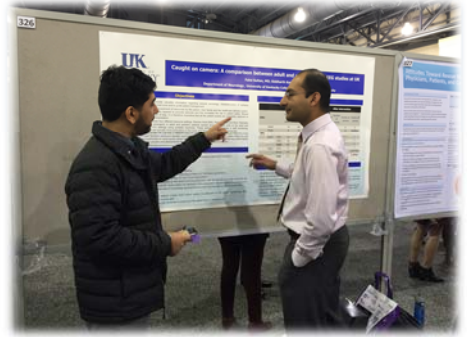
Happy Hours



Proud father, Jordan Clay (AY 19) showing off first-born son, Garrison!



Is that Rocky or Arun? Senior Arun Swaminathan (AY 16) enjoying the moment at the 2015 American Epilepsy Society Meeting.



Fahd Sultan (AY 16) presenting at the 2015 Annual Epilepsy Society Meeting.



In Las Vegas for the ANA Conference, Vascular Fellow, Danny Rose (AY 15) met Penn Jillette.



Alumna Terry Postma (AY 08) completed a two-month deployment last summer in Sierra Leone to support the Centers for Disease Control & Prevention's Ebola Response.



Congratulations to Divya Singhal (AY 12) for her newly obtained ABPN Clinical Neurophysiology Certification.

Local Events & Save the Dates:

- Ice Skating in Triangle Park: November 2—January 11
- Lexington Restaurant Week: February 26—March 4
- 2016 University of Kentucky Neuroscience Institute Practical Update in Neurology & Neurosurgery: April 29
- Into the Light Exhibition, Equine Art Show: until January 26
- Kentucky Crafted—the Market: March 4—March 6
- Resident Research Day: June 1
- We've Been Thinking Tour, Jeff Foxworthy & Larry the Cable Guy: February 19
- The Lexington Ballet presents Alice in Wonderland: April 15—April 16
- Graduation: June 5



Have a submission or want to write for **the Hammer**?

Email ukneuroresidents@uky.edu

Do you know a superstar?

gme.med.uky.edu/resident-month-nomination

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