



**1. Burnout in Academic Neurology: How bad is it, and what can we do to prevent it?
(Sunday 10/21/18)**

Abstract: Career dissatisfaction among healthcare providers is reaching epidemic proportions, with more than 50 % of practitioners suffering symptoms of burnout. This may be particularly true for academic physicians who face the additional burdens of performing research, writing papers and grants, administrative duties and teaching medical students and residents. Burnout involves loss of the feeling that one's work is important, valued and meaningful. It damages the physician patient relationship, causing depersonalization and loss of the vital connection and the pleasure of patient interactions. Career dissatisfaction may reduce clinical and academic productivity, can lead to depression and induce physicians to leave academics or medicine entirely. These effects are magnified in the academic setting due to the loss of potential lifesaving research and the cascading effect of poor satisfaction on the training of medical students and residents. Dr. John Greenfield will present results from a survey of clinical faculty at UConn Health and its ramifications for academic departments. Dr. Patrick Reynolds will discuss burnout among Neurology residents and ongoing efforts to understand and mitigate this problem. The focus will be to provide tools for improving career satisfaction among academic neurologists and neurologists in training.

Learning Objectives:

1. Describe the effects of burnout on academic clinicians.
2. List factors associate with burnout among academic clinical faculty, and possible remedies.
3. Discuss strategies for detecting, mitigating and preventing burnout in Neurology residents.

Speakers:

L. John Greenfield, Jr., MD, PhD, Professor and Chair, Dept. of Neurology, University of Connecticut School of Medicine/UConn Health

Patrick Reynolds, MD, Professor of Neurology, Wake Forest University.

Preventing Burnout and Promoting Resilience Among our Trainees: Patrick S. Reynolds, MD

Burnout is the result of three related conditions: emotional exhaustion, depersonalization, and decreased sense of personal accomplishment. It makes you stop caring about yourself, your patients and your future. Burnout increases the risk of committing medical errors, having

unprofessional interactions with patients, colleagues and co-workers, and increases rates of depression, substance abuse and suicide.

Factors that influence resident burnout include: increasing workload, lack of control, mostly negative feedback for performance, sense of community, fairness of treatment, the dichotomy between institutional mission statements and day to day actions, and perceived or actual lack of time for self-care.

Some institutions are looking for a quick fix to prevent burnout. However, burnout is not simply a lack of wellness, and simply promoting wellness does not eliminate burnout. Burnout (or failure to thrive) arises from a lack of resiliency when faced with adversity. The remedy for burnout is ENGAGEMENT, which is the inverse of burnout. Engagement is a positive state of fulfillment characterized by vigor, dedication and absorption. Resiliency is a state of being that promotes wellness and decreases the impact of physical and psychological stress. Resiliency is not a personality trait – it is a series of behaviors that promote engagement. In Andrew Zolli's book, Resilience, Why Things Bounce Back, he defines resilience as “the ability of people, communities, and systems to maintain their core purpose and integrity among unforeseen shocks and surprises.”

Grit is a personality trait: firmness of character, indomitable spirit. Teddy Roosevelt describes grit in a famous passage:

“It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strived valiantly; who errs, who comes again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly.”

Angela Duckworth defines grit as perseverance and passion for long-term goals. Achievement is the product of talent and effort, the latter a function of the intensity, direction, and duration of one's exertions towards a long-term goal. Talent does NOT equal grit. Tom Brady is an excellent example of grit from the NFL. Scouting reviews described him as “lacks great physical stature and strength,” “a system-type player that could get exposed if forced to ad-lib,” “does not throw a tight spiral.” He was drafted 6th round, #199. He has gone on to 5 Superbowl wins, 4 Superbowl MVPs, 8 AFC Championships and 3 NFL MVPs. Grit enables and fosters a “growth mindset” (Carol Dweck), a belief that abilities are not fixed and that you can improve. Failure is an opportunity to improve, not an indictment of your inadequacies.

A strong resiliency framework is built upon healthy and adaptive emotional, cognitive, physical, social and spiritual characteristics. Siebert's resiliency model lists 5 Key Principles to promote resiliency: 1. Managing your personal health, 2. Problem Solving, 3. Increasing self-strengths: self-esteem, self-confidence, and self-concept, 4. Developing Positive Response choices, and 5. Learning good lessons from difficult situations.

We can promote resiliency and fight burnout using mentoring, coaching, and wellness programs. Mentoring and coaching programs can improve resident wellness and satisfaction. What exactly is coaching takes a valued person from where they are to where they want to be. According to Webster's Dictionary, coaching unlocks a person's potential to maximize performance. It is NOT

fixing people, but helping them be their best selves. Coaching helps physicians develop, function and grow to the best of their abilities, and helps them prioritize what THEY want to work on and set their own learning goals. It also explores what is RIGHT with them, identifying strengths and using them to overcome barriers. Coaching can identify effective coping skills and how/when to employ them. It helps physicians articulate their development over time and connect with what gives them meaning and purpose. The goal is to fight back against the forces of burnout. Coaching can help change the stress response using positive psychology to focus on the positive, not the negatives, and see the glass as half full. A good coach will try to identify and use the resident's strengths and talents, and set realistic goals.

“Most residents, no matter how accomplished they are, have insecurities. The coaching program offers an opportunity to deal with their insecurities in a supportive environment. It helps residents identify what they are doing well, why they do well at it and apply that self-knowledge to improve in the areas they are working on,” said a resident at the Massachusetts General Hospital who participated in the MGH Coaching Program.

At Wake Forest, the GME office surveyed all residents and received responses from 396 residents/fellows (response rate of 57%). Contributing causes of burnout identified by respondents included long hours without adequate time off between shifts, work-life imbalance, feeling unappreciated by staff and patients, inadequate support and respect from faculty or other staff, stress of the job itself (i.e. pressure not to make mistakes, feeling overwhelmed with responsibility, complex illnesses, etc.), inability to focus on education mission, inflexible work schedules, additional responsibilities (i.e. notes, paperwork, EHR, scheduling/referrals, etc.), and institutional/administrative barriers (i.e. staffing, clinic vs. education, financial priorities, etc.).

Barriers to seeking treatment/help with burnout included: 1) lack of time due to inflexible work schedules, lack of personal time, and inability to take time off, 2) stigma around fear of what the licensing boards will think, being “looked down upon” or “considered weak”, feeling “guilty about taking time off from work”, or “everyone is experiencing it so why do I need treatment,” 3) not being aware of resources, lack of support from institutional stakeholders, or personal financial burdens were identified as barriers in seeking resources, 4) the culture of the program – “Understanding that residency is supposed to be difficult and straining”, “assuming it’s normal part of residency that all of us have to toughen through”, or “you survive it and move on,” and 5) Self-imposed barriers – personal pride/ego, lack of motivation, or different priorities.

Strategies to meet the ACGME requirements and fight burnout include reducing workload by re-arranging rotations and addition of advanced practice providers, as well as off-loading some work to attendings. It may be helpful to give residents control over their schedules, listen to resident feedback on improving rotations, and allow residents input on conference scheduling and content. Residents typically only hear from supervisors when they are doing something wrong, and it is important to reward them for good performance by enhancing positive, real-time feedback and coaching residents to view positive aspects of their job and not just negatives. It is also helpful to foster opportunities for resident interaction outside of the hospital, as well as faculty-resident interaction and engagement and get to know the people behind the white coats. Attendings need to promote wellness and be role-models. Programs should promote fairness by ensuring equitable rotation distribution and providing mentorship and coaching for all residents.

Resources:

MGH Professional Development Coaching Overview: Kerri Palamara, MD,
kpalamara@partners.org.

Angela Duckworth: *Grit: The Power of Perseverance and Passion*. New York: Scribner, 2016

Andrew Zolli and Ann-Marie Healy: *Resilience: Why things bounce back*. Free Press, 2012

Carol Dweck: *Developing a Growth Mindset*.

<https://www.youtube.com/watch?v=hiiEeMN7vbQ>

Al Siebert: *The Resiliency Advantage: Master Change, Thrive Under Pressure, and Bounce Back from Setbacks*. Berrett-Koehler Publishers, 2005

Faculty Wellness and Burnout: L. John Greenfield Jr., MD, PhD

Disclosures: None relevant to this presentation

Nationwide, up to 50% of practitioners suffer symptoms of burnout. According to the Annual 2018 Medscape study,¹ 42% of practitioners report symptoms of burnout. The prevalence is higher in women (48%) than men (38%), and increased with age: 35% at age 28-34, which increased to 50% at age 45-54. Burnout is also associated with depression. For neurologists, 48% report burnout, which is among the specialties with highest burnout rate. About 17% of neurologists report both depression and burnout.

Burnout is the loss of the feeling that one's work is important, valued and meaningful: "An erosion of the soul caused by a deterioration of one's values, dignity, spirit, and will,"² according to Dr. Christina Maslach, a pioneer in the field. Symptoms of burnout include: 1) Emotional exhaustion (EE), a loss of emotional resources that makes it difficult to deal with patient and work demands, 2) Depersonalization (D) a devaluation of individuals associated with loss of empathy for patients as people and viewing patients as "cases" or diseases, which can be seen as the need to vent about patients or work, with cynicism, sarcasm and "war stories," and 3) Decreased career satisfaction, which leads clinicians to doubt the meaning and quality of their work and can lead to fear of mistakes and their consequences.

Burnout can cause damage to relationships, both clinical and personal, lower patient satisfaction, lower quality of care, increased medical errors, higher malpractice risk, decreased productivity, career dissatisfaction, higher physician and staff turnover, depression & alcohol/substance abuse, and even physician suicide. Physician suicide is a major public health problem. A doctor commits suicide in the U.S. every day, and physicians have the highest suicide rate of any profession (28 to 40 per 100,000, more than twice that of the general population). According to Washington Post reporter Patricia Wible,³ physician suicide is related to emotional stress, long work hours, sleep deprivation, bullying/hazing, "assembly-line medicine," pressure to produce RVUs, patient deaths, malpractice suits, academic failures, etc. She relates that medical practice can produce "On-the-job post-traumatic stress disorder."⁴ She notes that the term "burnout" shifts the blame to doctors for their emotional distress, deflecting attention from unsafe working conditions, and feels that loss of physicians is a public health crisis.

The effects of burnout may be magnified in the academic setting, as it can cause reduced clinical and academic productivity, Loss of potential lifesaving research and innovation in patient care delivery. There may also be a cascading effect of poor satisfaction on the training of students,

residents and fellows, with faculty modeling callous attitude and “bad behavior.” Academic physicians face the additional burdens of research, writing papers and grants, administrative duties and teaching. Possible causes of burnout include the stresses of clinical medicine, with a high level of responsibility and little control over work conditions, patient outcomes and satisfaction. Inefficient systems of care result in tight scheduling and pressure to see more patients, who may arrive late and disrupt flow. The electronic medical record (EMR) is time-consuming, sometimes seen as the unrelenting “last patient of the day.” Preauthorization for tests and medications and rigid institutional scheduling policies undermine physician autonomy. These stresses may result in poor work/life balance, as patient phone calls, refills, and questions prolong the workday and charting is often deferred to nights and weekends. This leaves little protected time for education, research and activities that may be more fulfilling to an academic career.

To assess the degree and characteristics of burnout at UConn Health, we designed the “Reducing Burnout and Increasing Career Satisfaction Study” (ReBICS). The goal was to determine the impact of clinician burnout in an academic medical center. We surveyed UConn Health academic clinicians with at least 10% clinical effort. Questions included the abbreviated Maslach Burnout Inventory and UConn-specific questions. The Maslach Burnout Inventory assess 3 dimensions of burnout: personal accomplishment, depersonalization and emotional exhaustion. We also asked questions about demographics, exercise, sleep, child care responsibilities, work hours and work type allocations between clinical, teaching, research, and administration, and asked respondents to rate their satisfaction with and importance of work conditions. There were also open-ended questions and opportunities for comments.

A total of 133 faculty responded with sufficient data for scoring. There were 70 women (52.6%) and 63 men (47.4%); 65% have dependent children or parents, 91% are married or living with a long term partner, and 83% had hobbies or regular fun activities. 32.5% of respondents had moderate to high burnout in personal achievement (PA), 57.6% had moderate or high burnout on depersonalization (D) and 66.4% had moderate or high burnout on Emotional Exhaustion (EE). There was no association between burnout indices and having children, being married vs single, or having hobbies (most do). There was a mild association with gender: men had lower EE than women ($p = 0.05$), and primary caregivers had higher EE ($p = 0.05$). There was no correlation with years in practice or the number of years at UConn Health.

Less sleep was associated with increased EE ($p = 0.05$). The median number of sleep hours was 7 (mean 6.59 ± 0.86). The relationship between burnout and loss of sleep is complex: lack of sleep may be the result of work demands, but may also contribute physiologically to burnout. Insufficient sleep predicts burnout: < 6 hours of sleep was the main risk factor for burnout in 15 of 385 subjects identified as being burned out.

Burnout is associated with sleep disturbance.⁵ Polysomnograms of people with burnout show increased sleep fragmentation, more wake and Stage 1 time, lower sleep efficiency, less slow wave and REM sleep, and lower delta power in NREM sleep.⁶ Inadequate sleep and exercise was associated with burnout and depression among medical students at Univ. of Pittsburgh.⁷ Positive depression screening, pathological sleepiness, and sleeping less than 7 h a night were independent predictors of burnout. Sleep deprivation has dire consequences for performance, resulting in poor medical decision-making, increased risk of sharps injury, motor vehicle accidents on the drive home, and increased medical errors, including 36% more serious medical errors and 300% more errors that lead to a patient’s death.⁸

In the ReBICS study, EE burnout was also associated with less exercise ($p = 0.02$). This is consistent with the results of the Pittsburg medical student study of burnout, in which decreased exercise frequency was significantly correlated with lower professional efficacy.⁷

Other issues associated with EE burnout in the ReBICS study include documentation requirements, board certification and maintenance of certification. Enjoying academic Pursuits correlated with decreased burnout, as did higher career satisfaction scores.

High satisfaction with other academic/clinical work parameters (flexibility of schedule, latitude to pursue areas of interest, improvement of knowledge/skills, academic success and promotion, mentorship, effective communication from leadership, support of personal wellness, recognition for accomplishments) also negatively correlated with burnout indices. Interestingly, there was no relationship between satisfaction with salary or UConn's reputation and measures of burnout. Institutional engagement was negatively correlated with EE burnout, and was lower than other measures of work satisfaction.

Academic physicians divide effort between clinical, research, education, and administration missions. We hypothesized that career dissatisfaction and burnout may arise from misallocation of effort among missions, i.e. faculty would be happier spending more time doing the things they prefer to do. We asked faculty for their ideal % effort in each mission and compared to actual reported effort by mission. The difference between these is effort mismatch. Surprisingly, we found no clear correlation between effort mismatch and burnout, though 75% of faculty preferred to do less clinical and administrative effort and more research and education.

Mitigating burnout is a challenging problem, for which there is no easy top-down solution. Institutions are reluctant to increase salaries, reduce RVU targets, shorten work hours, or add support personnel due to already tight bottom lines. Ever-changing regulations are designed to delay/deny service to reduce cost; the difficulty in accomplishing tasks is intentional. Modern EMRs are powerful but reflect the complexity of modern health systems, resulting in lots of clicks. Moreover, mandated burnout programs (exercise, support groups, counseling, coaching) are yet another time-consuming obligation, and may inadvertently worsen burnout by increasing demands on those they are designed to help. Any

Solutions to burnout need to bolster individual autonomy and efficacy. When asked how they cope with burnout,¹ physicians report both adaptive responses (exercise, sleep, music, talk with friends/family) and maladaptive responses (seeking isolation, overeating or poor diet, alcohol abuse). Aerobic exercise may improve burnout. In 12 male participants with high MBI scores, a 12 week exercise program reduced perceived stress and symptoms of burnout and depression.⁹ Similarly, a 12 week exercise program for residents at Mayo Clinic in 2011 improved quality of life with marginal effect (24% vs 29%) on burnout.¹⁰ Exercise may also improve sleep quality and quantity.

Individualized programs may be beneficial, but do not alter the dynamics that produce burnout at the institutional level. Organizational factors are the primary drivers of physician burnout. Managing the problem with stress management workshops, resilience training, coaching neglects systemic drivers of burnout; these treats the symptom, not the cause, and can be seen as an insincere effort to shift blame for burnout onto the individual. "Reducing burnout and promoting engagement are the shared responsibility of individual physicians and health care organizations."¹¹

Strategies for leaders of departments and healthcare organizations include: 1) Acknowledge and assess the problem, 2) Model the behaviors you want to see - demonstrate engagement, positivity, teamwork, 3) Recognize the unique talents of individual physicians and what motivates them. Physicians who spend >20% effort on the work dimension they find most meaningful are at greatly lower risk of burnout.¹² 4) Align faculty effort with preferred activities, 5) Assess and reward success, and redirect faculty when outcomes are not optimal, 6) Align institutional and individual values. “The patient comes first” should not be at expense of the physician. 7) Promote flexibility and work-life integration. High work hours expected in medicine make it difficult for physicians to integrate personal and professional lives. This may be even more problematic for women physicians due to different cultural and societal expectations. Reducing or restructuring work hours can help physicians recover from burnout.¹³ 8) Provide resources to promote resilience and self-care, including confidential counseling, coaching, and resilience training. It is important not to shift blame for burnout onto the individual. 9) Use rewards and incentives wisely. Incentive pay (above base salary) for extra productivity motivates additional effort and may improve satisfaction. A solid base salary promotes a sense of security. Pure incentive with most of salary at risk creates stress, and incentivizes long hours that can lead to burnout. Non-financial rewards (protected time, greater flexibility) may increase satisfaction and fulfillment. “Doctors fare better in organizations where they are not compensated for individual productivity, are not under time stress, have more control over clinical issues, and are able to balance family life with their work.”¹⁴ 10) Increasing support personnel (medical assistants, nurses, scribes) can increase productivity and physician satisfaction.

The Electronic Medical Record (EMR) is a major contributor to burnout. Physicians spend ~ 33% of their work hours performing direct clinical work and 49% completing clerical tasks and interfacing with the EMR.¹⁵ For every hour of clinical work, physicians spent 2 hours on clerical work or EMR tasks.¹⁶ Time for charting is not built into clinic schedules and often spills over to nights and weekends. Using the EMR may be harder on older physicians and the less tech-savvy. It is important to develop strategies to use technology for good, including templates, smart phrases, standing order sets, and speech-to-text programs (Dragon/Fluency). Precharting prior to visit can reduce clinic day stress. Finally, scribes can increase productivity and reduce stress and burnout. Prompt and effective IT support is a must. Providing time in the workday to complete documentation tasks and enter data into the EMR helps preserve work-life balance.

Within a department, it may be helpful to develop targeted interventions by identifying local factors that could be rapidly altered to improve physician burnout and satisfaction. The best approach is to look for “low-hanging fruit” – things everyone agrees need to be fixed and don’t cost much. It is important for physicians to participate in designing change. Additional steps to reduce burnout include reducing required activities, offering flexible or part-time work schedules, and hiring floating clinicians to cover unexpected leave.

Another key factor for improving work/life balance is to cultivate a sense of shared community at work. This can be accomplished by celebrating achievements, supporting peers through challenges, mentorship, shared learning experiences and down time (lounges, cafeteria spaces). Bringing life into the workplace can occur by supporting cultural events, arts, sports, conversations, and other aspects of “life at work.” Increased social networking can be accomplished by designing workspaces that foster interactions but that also allow for individual privacy when needed. Workplace teams can address work flow and quality measures.

Resources

AMA STEPS Forward™ collection has five professional well-being modules:
<https://www.stepsforward.org/modules/joy-in-medicine>

American College of Physicians: www.acponline.org/about-acp/chapters-regions/united-states/new-mexico-chapter/physician-burnout-and-wellness-information-and-resources

Institute for Healthcare Improvement: IHI Framework for Improving Joy in Work

http://www.ihl.org/resources/Pages/IHIWhitePapers/Framework-Improving-Joy-in-Work.aspx?gclid=Cj0KCQjw3ebdBRC1ARIsAD8U0V4IREOjFqqYY6VdVnq4EbfT_LTnz048NRnDGewYQHY3HdcnC3hVuc8aAvXaEALw_wcB

Specialty Association resources

AAFP: <https://www.aafp.org/about/constituencies/resources/new-physicians/burnout.html>

ACEP: https://www.acep.org/globalassets/uploads/uploaded-files/acep/clinical-and-practice-management/resources/wellness/burnout-resources_062315.pdf

AAN: <https://www.aan.com/tools-and-resources/practicing-neurologists-administrators/career-articles/why-are-neurologists-burned-out/>

AHRQ Research Funding:

<https://www.ahrq.gov/professionals/clinicians-providers/ahrq-works/burnout/index.html>

Other:

The Happy MD: <https://www.thehappymd.com/>

KevinMD.com: <https://www.kevinmd.com/blog/>

Helpguide.org: <https://www.helpguide.org/>

Stressremedy.com: <https://stressremedy.com/>

MedEdWeb: <https://www.mededwebs.com/blog/well-being-index/7-resources-for-physicians-suffering-from-burnout>

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Additional Reading:

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2. Creating a Culture within your Neurology Department (Monday 10/22/18)

Abstract: The job of running an academic department has been compared to herding cats; faculty members have their own individual strengths and weaknesses, goals and needs, and if left alone tend to pursue their own interests with little regard for the overall goals of the department chair or the institution. Departmental goals may include high levels of clinical performance, improved research grant and publication productivity, outstanding educational achievement and improved financial performance. Aligning faculty and department goals to ensure consistently high level of performance across these missions can be challenging, particularly since large institutions may be inflexible and resources limited. How does a department chair create a culture of high performance, career satisfaction and engagement in which faculty members see their contributions to each of these missions as vital and important? How do you maintain this culture despite declining clinical reimbursements, lower grant funding rates, and increased educational expectations? What does it take to create a culture of excellence? Dr. Robin Brey will present her approach to creating culture in a large urban medical center, and Dr. Gregory Holmes will discuss the challenges posed within a smaller rural department. For those new to these concepts or who want to know more, see the recommended reading below which presents a nice synthesis of critical concepts as well as specific strategies for group leaders.

Learning Objectives:

1. Discuss strategies for aligning faculty and departmental/institutional interests.
2. Describe ways to encourage faculty members to view themselves as members of a team rather than individual practitioners or researchers.
3. Discuss approaches to build collegiality, camaraderie and esprit de corps.

Recommended Reading: “The Culture Code: The Secrets of Highly Successful Groups” by Daniel Coyle, Bantam Books, 2018.

Speakers:

Gregory L. Holmes, MD, Professor and Chair, Department of Neurological Sciences, Larner College of Medicine, University of Vermont
Robin Brey, MD, Professor and Edna Smith Dielmann Distinguished University Chair, Department of Neurology UT Health San Antonio

Building a Culture of Academic Excellence in a Rural Medical Center - Gregory L. Holmes, MD

“The anatomy lab was always freezing. This was our first course as medical students, and we had split our ourselves into groups – four students to every cluster. Each of us carried a copy of “Netter’s Anatomy”; by the end of three months in the lab, the volume would become chemically yellowed by formaldehyde, and to leaf through the tawny, crackling pages would be to feel your fingers becoming slowly embalmed. As the weeks drew on in that first year, we began to hear about residents, fellows and even senior doctors who had packed their scalpels and stethoscopes and left medicine. It was the late 1990s, and medical practice was just beginning to be assaulted by a thousand surgical cuts. Hospitals were changing to electronic medical records, and – although EMR had been sold to us as a means to ease work flow and to ensure patient safety (and yes, it did achieve these)- a doctor’s day felt more robotic and dehumanized: The residents in the wards seemed to spend the bulk of their time documenting notes, checking off codes and pressing buttons to generate automated bills. One night, as I recall, I overheard a young women resident breaking down in tears, her face silhouetted against the sharp light of the terminal as she typed manically. ‘I have spent two nights in the hospital and I haven’t even touched a patient. This is not what I came here to do.’”

Siddhartha Mukherjee

The Department of Neurological Sciences at UVM formed 6 years ago as a merger of the Department of Anatomy and Neurobiology with Department of Neurology. There are three academic pathways: Clinical Scholar, Education Scholar, and Tenured Research Scholar. The College of Medicine is on the campus of UVM. Burlington has 42,000 people; the state of Vermont has 600,000. The closest metropolis is Montreal which is about a 90 minute drive.

Being at a small, rural medical school in Vermont creates both challenges and opportunities. Disadvantages include: emphasis on primary care, lack of competition, limited sub-specialty depth, low salaries, difficult recruiting, extremely low state support, a bias against small institutions, limited opportunities for philanthropy. Advantages include: better work-life balance, great beer, relatively small faculty allows one to know their colleagues, collegiality, “We do more with less” attitude. Being in a small state also makes UVM eligible for the Institutional Development Award (IDeA) Program, which is an excellent source of grant funding.

Our strategy for keeping the faculty engaged is ensuring that there is more to Neurology than the clinic. Research is integrated into all aspects of our program. As a department that includes both basic scientists and clinicians, we have clinical faculty team up with research faculty, and graduate students teaming up with neurology residents. Clinicians and researchers attend the same conferences, and we hold mini-retreats where both research and basic research is presented.

UVM also supports the education mission. The Teaching Academy sustains and supports an interdisciplinary community of educators who value the scholarship of teaching and learning while facilitating educator development. Faculty receive compensation for teaching. Recommendations for creating a vibrant and productive culture include: Partner with basic science departments to create synergies that benefit both scientists and clinicians Engage with curriculum committee to invigorate educational programs. Embrace collaboration across

departmental lines. Keep on top of your department mentors, since matching mentor to mentee is critically important for the success of that relationship. Mentorship should go beyond the workplace and embrace other areas, supporting work-life balance. You should feel free to utilize mentors from other departments and share resources. You can be most productive by emphasizing research and teaching at every opportunity.

“Some solutions to fixing burnout are therefore pragmatic. They involve lessening burdens; removing paperwork that does not positively affect patient care, lightening bureaucracies and dissolving the form-filling, diagnosis-coding, button-pushing culture of modern medicine. But the solutions suggested by our anatomy group – an informal, minuscule, far-from-scientific survey – involve more work. We survived, I think, by deepening our commitments to research. We tried to increase our mastery within peculiar medical niches. And powerful, autonomous interests kept us going. The mysteries of metastasis, the intractability of anxiety disorders and strange new disease of blood cells kept our brains and souls alive when the hospital was asking us to punch numbers into terminals. We didn’t burn out, perhaps, by burning a little more.”
Siddhartha Mukherjee.

Creating a Successful Culture in a Department of Neurology - Robin L. Brey, MD

Creating a positive and productive culture is critically important. It has been said that “Culture eats strategy for breakfast.” Culture trumps strategy every time. “Maintaining an effective culture is so important that it, in fact, trumps even strategy” (Howard Stevenson). Strategy offers a formal logic for an organization’s goals and orients people around them. Culture expresses goals through values and beliefs, and guides activity through shared assumptions and group norms. Leaders are responsible for both.

Culture guides discretionary behavior and dictates how to respond to novel situations. It determines how workers decide whether to risk telling bosses about new ideas or problems, and shapes how decisions are made when leadership is in not in the room.

An example of the influence of culture on corporate behavior is how Johnson & Johnson reacted to the deaths of 7 people in Chicago in 1982 from Extra-strength Tylenol that was laced with cyanide. Against legal and law enforcement advice, J&J initiated a national recall of all Tylenol products at a cost of over \$100 million. Their rationale for this action was in their corporate mission statement: “We believe that our first responsibility is to doctors, nurses and patients; to mothers and fathers and all others who use our products and services.” That act of corporate ownership of the problem likely saved both the brand and the company.

Aligned with strategy and leadership, a successful culture drives positive organizational outcomes. Successful cultures have three compelling attributes: 1) They consistently produce outstanding results, 2) They attract, motivate and retain top talent, and 3) They successfully adapt to changing conditions. In a successful culture, people feel free to be themselves. They understand what is really going on. Their strengths are recognized and they have opportunities to grow, and conditions are fair and transparent. They feel proud to work in the organization. Their work is meaningful, and not hindered by stupid rules. Factors that hinder a successful culture include poor communication, toxic employees or bosses (see “The No Asshole Rule” by Robert

Sutton). Poor cultures focus solely on profit/results. Their leadership is resistant to change, and they rely on performance management rather than inspiring individuals to excel.

There are significant costs of having an unsuccessful culture. Health care expenditures are nearly 50% higher. Engagement in work negatively impacted, with 37% greater absenteeism, 16% lower profitability and 37% lower job growth. Poor cultures do not inspire loyalty, resulting in a 50% increase in voluntary turn-over. There is also a higher rate of workplace harassment

Leaders are responsible for developing a successful culture. “Organizations are lengthened shadows of their leaders” (Ralph Waldo Emerson). Leaders need to ask themselves the following questions: Do you take culture seriously? Do you understand and monitor your culture? Do you use culture as a way to communicate values and strategy? Are you investing adequately in the people on your team? Do the times make the leader or does the leader make the times? It is important for leaders to acknowledge when failed policies demand a change in direction. They need to anticipate contending viewpoints, know when to hold back and when to move forward. They must set an example, and understand the emotional needs of the team. A good leader should never let resentments fester, and needs to control angry impulses. It is important to protect colleagues from blame, keep your word, gauge sentiment and establish trust.

To shape culture, you should begin by understanding your organization’s culture (and sub-cultures). It is important to understand what type of culture is needed to advance your organization’s strategies and goals. A number of cultural profile Instruments can help you identify your organization’s culture style.

UT Health San Antonio Department of Neurology has developed and articulated its own set of values, which we ranked in order of importance. #1 Purpose; #2 Caring; #3 Learning; #4 Order. For example, under Caring, we listed the following: We respect and value all three academic missions realizing that it takes all of us working as a team to accomplish our goals. We treat everyone we work with and provide care for as we ourselves would want to be treated. We strive to make our department among the top places in which to work, learn and receive care.

We also drafted a UT Health San Antonio Department of Neurology Vision statement, with each statement results-oriented.

Clinical: Clinical services sought after locally, regionally and nationally for providing the highest quality of care.

Education: Highest caliber educational experiences for medical students. Outstanding residency and fellowship training that prepares trainees for the future practice of neurology

Research: Known nationally and internationally for the breadth and depth of neuroscience research

Faculty Development: All faculty members are successful – no person left behind!

To be successful in shaping culture, it is important to articulate the aspiration, and understand what outcomes the culture produces. You should aspire to develop a culture that aligns with your mission and goals. It is necessary to select and develop leaders who align with the target culture, and this should begin with yourself. You should consistently demonstrate the characteristics of the desired culture. Use organizational conversations about culture to underscore the importance

of change. Encourage and create opportunities for meaningful dialog, and clearly link culture to tangible goals. Reinforce the desired change through organizational design. Organizational structure can have a profound impact over time on how people think and behave within an organization.

An important strategy for shaping culture is to build safety. Faculty must feel that they are part of this team. Moreover, this team is special; we have high standards here. I believe you can reach those standards. The leader should share vulnerability, and rather than direct what will happen in response to an unexpected crisis, ask “Does anyone have any good ideas?” Culture is shaped when you establish the purpose of your group, name and rank your priorities. Once they are established, these priorities need to be communicated broadly.

Discussion:

Several audience members noted that having reunions at the AAN meeting is a great way to reinforce culture and involve prior trainees and faculty in the institutional community.

Transparency and honesty were considered critical traits for a successful culture. Chairs need to be certain to gather appropriate information before reacting to a stressful situation, and not to send any emails written in haste or anger. Having writers/editors as a resource can improve departmental productivity for grants and papers. Some faculty just do not fit into the culture and, like a “bad apple,” can ruin the culture. It is better to dismiss those people early if unable to fix the problem. In presenting news to the faculty, it is best to have a 7:1 ratio of good to bad news. Faculty meetings should be divided up equally between missions to ensure that all missions are discussed. It is important to model the behaviors you want to see in your faculty.

3. Faculty Recruitment and Retention: Lessons and Strategies (Tuesday 10/23)

Abstract: One of the most important jobs for a department chair is recruiting and retaining high functioning, productive faculty. Every department has its own advantages and challenges in recruiting faculty, and each chair has something different and beneficial to share. Rather than have one or two speakers discuss their strategies, successes and failures that may be unique to the circumstances of their institution, 6 chairs from a variety of regions and institution styles (eg. research intensive vs. clinically intensive, small vs. large, urban vs. rural) will speak for about 5-10 minutes each and present one or two vignettes with no more than 3 powerpoint slides. Topics for discussion will include:

- advertising and/or use of headhunters
- major retention issues and how you resolved them,
- how you compete when a candidate has multiple offers,
- differing strategies for recruiting clinician scientists, full time researchers or full time clinicians,
- how to recruit for diversity,
- salary issues and disparities among subspecialties,
- joint recruitments of married faculty pairs,
- fitting the job to the candidate vs the candidate to the job,
- other related questions

There should be ample time for audience questions and discussion.

Learning Objectives:

1. Describe several strategies for recruiting outstanding research-intensive or clinical-intensive faculty.
2. List successful strategies for retaining faculty who may be considering positions elsewhere.
3. Describe techniques for successful recruitment of diverse candidates, married couples, and those with less common situations or needs.

Speakers:

Allison Brashear, MD, Professor and Chair of Neurology, Wake Forest University School of Medicine

Frances Jensen, MD, Professor and Chair, Dept. of Neurology, Univ. of Pennsylvania

Matthew Rizzo, MD, Francis & Edgar Reynolds Chair & Professor, Dept of Neurological Sciences, University of Nebraska

Sanjay Singh, MD, Professor and Chair, Dept. of Neurology, Creighton University School of Medicine

David Standaert, MD, PhD, John N. Whitaker Professor and Chair, Dept of Neurology, Univ. of Alabama, Birmingham.

Gretchen Tietjen, MD, Professor and Chair, Dept. of Neurology, University of Toledo

Faculty Recruitment and Retention – Matthew Rizzo, MD

When recruiting to an academic position in “fly-over country” like Nebraska, it is important to sell the city and what the community has to offer, and make it clear how much the candidate is needed. Extra resources may be required to make a competitive offer, and it is helpful to work with the Dean to obtain these resources. It is important to answer questions in detail. When planning the recruitment, you should also plan the career development pathway and timeline and to have this written out for the recruit. “Treat each candidate like an orchid” with mentorship and a nurturing environment. It may be useful to encourage young faculty to collaborate in groups of “Young Turks” who feel special and empowered to use collaborative leadership to solve their own problems. They can connect among themselves and with researchers and educators. The goal is to develop an “Idea Factory” like Bell Laboratories in the early 20th century, where new ideas and concepts can take off. You want to make your environment a space where clinical research can flourish. Pairing clinicians with researchers can make both more productive.

Another issue for recruitment is ensuring that the candidate’s spouse is on board, which may involve finding a compatible job for the spouse (aka the “two body problem”). It is important for new faculty to integrate into the community, when applicable joining a church, rotary club, or working with disease-related patient advocacy groups. Each faculty member should feel special, and the chair should allow and support extra training and sabbaticals to help them continue to develop their skills and career. The chair should let faculty know you are working for them and not vice-versa. It is good to take them out to dinner occasionally.

The chair may want to develop a “kitchen cabinet” of close advisors, and meet with them separately from the whole faculty. IN order to avoid the “us vs. them” mentality between the department and hospital, it can be helpful to meet regularly with key people in the hospital administration. “Act locally but think globally”: your best recruits may be those you have develop and nurtured in your own department. Always emphasize success.

Academic Recruitment in the 21st Century: A Chair's Perspective - Sanjay P. Singh, MD, FAAN

Stroke and chronic neurological conditions will experience the greatest growth in healthcare service utilization in the next ten years, with inpatient admissions for stroke expected to grow by 22%, Parkinson’s disease 19%, spine diseases 15%, brain cancer and MS 11%. Outpatient volumes in these areas will increase even more, by 27% for stroke and 28% for Parkinson’s disease.

There will be an increasing shortage of neurologists to meet these needs. The average wait time to see a neurologist is 35 days for a new patient visit and 30 days for a follow---up visit. The US could use 11 percent more neurologists to meet current needs. By 2025, that number will grow to 19%. Sg2 Analytics forecasts a 30% shortage. Neurologists are in good supply in urban areas but in large and mostly rural areas there can be a 30% shortage, creating “Neurology Desert Zones” particularly across the Midwest.

A population of 100,000 people can support 5.1 neurologists, or about one per 20,000 people. The availability of neurologists varies widely, from 1:10,827 in Massachussetts and 1:20,552 in

Connecticut to 1:33,658 in Texas and 1: 49,935 in Wyoming (from AMA Physician Master File, 2017). Neurology compensation has increased significantly in the past 5 years, from an average of \$262,000 annually in 2013/14 to \$305,000 in 2016/17, often with additional incentives including an average signing bonus of almost \$30,000, relocation allowance of \$11,000 and CME support of \$3500. Despite increasing costs, neurologists are good sources of revenue for their affiliated hospitals, with downstream annual revenues increasing from \$558,000 in 2010 to \$1,025,000 in 2016 (Merritt Hawkins 2016 Physician Inpatient/Outpatient Revenue Survey).

The AAN Neurology Resident Survey found in 2011 that 86% of residents intended to complete a fellowship, up from 78% in 2008. “Lifestyle” was rated a most important factor by 75% of residents. Most of our residents are “Millennials,” born in the period from 1981 to 1996. Earlier generations include Generation X (born 1965-1980), Baby Boomers (born 1948-1964) and the Silent Generation (born 1928-45). Millennials differ significantly from earlier generations. According to Pew Research, 50% consider themselves politically unaffiliated and 29% are religiously unaffiliated. They have the highest number of Facebook friends (average 250 vs 200 for GenX). 55% have posted a “selfie” to social media, vs. 20% for GenX. They send a median of 50 texts per day. In 2012, only 19% of Millennials said that in general, others can be trusted. 20% have at least one immigrant parent. There are also more female physicians, representing 30% of physicians in the under-40 and 40-49 age groups but just over 20% of physicians aged 50-59 and about 18% of those over 60. At academic institutions, women comprise 30.8% of neurologists, more at lower rank (40.1% of instructors and 43.3% of assistant professors) than higher rank (30.2% of associate professors and 13.8% of professors).

Physicians most commonly searched for their first job through referrals (51%) or networking (48%). The next most popular searching method was medical-specific online job boards (39%). Social media (12%) and career advisors at medical programs (13%) were the least used.

Recent data from the AAMC (2010) demonstrate a shortage of 130,600 physicians by 2025, including 65,800 primary care physicians, which suggests increased competition among employers for physicians, including academic health systems and increased need for effective recruiting and retention. Liu and Alexander (2010) reported an 11 % decrease in the percentage of assistant professors promoted within 10 years, implying that more academic physicians are not achieving expected career milestones and will not be on track to become physician leaders. Retention is a significant problem: 40% of medical school faculty leave their employers within 10 years. The physician workforce is also aging, with 29% of physicians over age 55 in 2007 compared to 9% in 1967 (Alexander and Liu, 2009). These factors creating a high demand for recruiting or developing replacement faculty. Generational differences in the career and life goals affect recruiting. Personal/family time was rated the most desirable aspect of a career by 71% of physicians under age 50 (Salzberg, 2007), making it more difficult to recruit young physicians into challenging academic and clinical positions. The cost of workforce development continues to rise. It takes 10 years for an academic health center to recoup the initial investment in “start-up” for a new faculty member (Joiner et al., 2007). Physician turnover costs range from \$115,000 for a generalist to \$587,000 for a surgical subspecialist (Schloss et al., 2009) and can represent up to 5% of the system’s annual budget.

Recommendations for successful recruitment include: 1) be flexible – consider part time positions and flexible work hours, 2) Define the vision and the faculty member’s role in bringing that vision to life, 3) Be aware that quality of life is an important factor, 4) Pay attention to recruiting the physician’s spouse as well as the physician, 5) You can no longer rely on recruits joining you

just because you have a “great department.” 6) Arrange meetings with mentors and research collaborators. 7) Consider how the recruit fits into a “Service Line.”

Recruiting and Retaining Physician Scientists David Standaert, MD, PhD.

- Have a strategic plan to establish outstanding programs in few well-defined areas
 - Avoid the “broad brush” approach of seeding a few scientists across many clinical areas
 - Plan for contiguous research space and shared core facilities
 - Incorporate shared and core equipment in to individual recruitment offers
 - Create a clinical practice that is supportive of part-time clinicians
 - It is essential to have a strong “front end” and cross-coverage arrangements to protect the physician-scientist from daily clinical queries and responsibilities
 - Build and use endowments to support physician-scientists
 - Endowments are critical to reducing the need for “soft-money” support
- Clinicians need to understand that patient revenue is needed to support research.
- Recruit externally for key roles, and then grow from within
 - Promote use of training mechanisms available: MSTP, R25, K08/K23, K99, T32

Faculty Recruitment and Retention – Gretchen Tietjen, MD

Successful recruiting often depends on having the right fit between the candidate, the position and the institution. Candidates want everything to be completely arranged and set, rather than having to make arrangements themselves when they arrive at a new position. Candidates prefer that you spell out conditions very clearly in the offer letter. However, this reduces flexibility to adapt to changing departmental or institutional circumstances in the future. The job may need to change as conditions change. When recruiting junior faculty, it helps if they have local connections that will help them integrate into the community. It also helps to get community support for expensive recruitments, for example neurointerventionalists who command high salaries and might be able to cover multiple hospitals. Hospital systems often mandate search committees and attention to recruiting for diverse candidates, which can be difficult for departments with small faculties and a very limited candidate pool from which to draw for highly specialized positions. A good way to recruit subspecialists is to send your residents to outside places for fellowship training and then recruit them back onto your faculty, often signing the recruitment deal even before they have left for fellowship training. It is very important to honor what you promise to candidates, so that they can trust that you will keep your word. New recruits need to find the right fit at the beginning of their career; otherwise, they are likely to leave. You can help retain them by recognizing and rewarding individual strengths.

Promoting Diversity in Recruitment & Retention – Allison Brashear MD, MBA

There are 3 P's in Recruitment for diversity:

1. Pipeline – develop your own talent pool from residents and fellows who can replace faculty who retire or leave

2. Purposeful – Recruit even residents as if you were recruiting them for later faculty positions. Use existing faculty to help find and recruit additional faculty members. Use network connections to identify potential candidates, and interview everyone who meets minimum criteria within the targeted group. Avoid potential mistakes that might make your city or program appear less friendly to diverse candidates.

3. Promote the careers of your diverse faculty using local and national awards, programs, networking opportunities. Look at other programs and see what they do to foster the careers of diverse faculty. Sponsor and mentor their careers.

Individualizing Faculty Retention and Recruitment - Frances E. Jensen, MD

Initiating faculty recruitment:

At most institutions, this begins with making case statement for position to the Dean or CFO, which should be based on an assessment of funding, mission gaps (need for clinical expertise or building an area of research focus). You will need to create a hypothetical, general academic plan to articulate the ranges of effort split among the academic missions (education/research/clinical/admin) and what promotion track(s) may be appropriate based on the candidate's training and interests.

When creating a search committee, you should attempt to balance committee membership to include members from inside and outside the division into which you are recruiting. All committee members will need to undergo diversity training, which at most institutions is a well-established process. The group should collaborate on crafting the job posting and be sure that it matches with the hypothetical academic plan. When candidate applications come in, the review process should include your diversity officer, both to select applicants for first round interviews and also as you select finalists.

Individualizing the process at the finalist/semifinalist level

Second interviews should include a research seminar or clinical grand rounds presentation when appropriate. You should ask candidates to prepare a 3-5 year career development plan or vision statement. With that statement, you can examine the specific needs for the applicant and connect him/her to potential collaborators/partners. You should identify key stakeholders for joint aspects of recruits based on the different components of their effort.

Once a finalist has been selected, stakeholder collaboration becomes key, since each will need to be forthcoming with what is needed for successful recruitment. It is important to create the collegial environment through the application process, NOT AFTER the arrival of the new faculty member! Successful integration into the faculty and early productivity are more likely when the pre-work has been done, rather than having the new faculty try to forge their own way. It also reflects the level to which the institution will go to accommodate the new faculty member.

The final negotiations

You will need to share your draft of the academic plan with the candidate. There should be no surprises related to expectations for effort split among the various missions. You should agree on a reasonable 3 to 5 year path towards greater (or total) self-sustainability.

Financial negotiations should be transparent. You should make it clear that non-standard aspects of the package need to be justified, and assist candidate in articulating ROI to stakeholders and administration. Negotiations at this stage are the first hint of the candidate's ability to be collegial, reasonable, as well as their style of self-advocacy. If it is not going smoothly at this point...think again (!)

This is painstaking work – but effort put in up front to connect the faculty with the community before hiring pays off later in that they integrate so much faster.

Retention

Annual meetings with individual faculty members can sometimes predict who might be looking to leave. You should inform your Dean early if you sense someone is a flight risk and might require a retention package. You should also inform your institution's development office who may be able to assist you in finding extra resources or an endowed chair.

As a retention package is developed, you need to be mindful of the need for parity with other faculty. You also need to consider the sustainability of the plan or package, and the consequential costs of retention including replacing clinical effort with additional faculty (or increased effort from existing faculty), new recruits for the division, etc.