Opinion & Special Articles:

The lost resident

Why resident physicians still need mentoring

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ABSTRACT

Mentoring is deeply rooted in medical practice. More than just a role model, a mentor is invested in the development of the mentee, providing personal and professional support, guidance, and the means for advancement. Mentoring is vital at all levels of medical training and plays an important role in the development of academicians. Increasing clinical demands, the competitive research environment, numerous administrative pressures, and the relative undervaluing of mentoring for faculty promotion have created challenges to resident mentoring. A greater emphasis on promoting mentoring opportunities for residents is needed at many levels. *Neurology*® 2013;80:e244–e246

Mentoring in medicine has long been a recognized factor in promoting and developing the future of the profession. It is being increasingly recognized as a substantial component of recruitment and retention at all levels of academic medicine.¹ The concept of mentorship has evolved over the years, with a recent report estimating at least 20 definitions in the literature.² As opposed to a role model, a mentor is a voluntary and active participant in the personal and professional development of the mentee, offering knowledge, experience, guidance, support, and opportunity for advancement.² In the literature, the duality of this relationship has been emphasized and the importance of a nonhierarchical but intimate partnership with both parties receiving gain has been highlighted.

Mentorship literature has traditionally focused on the importance of mentors at the medical student and faculty–junior faculty level. Mentors have been described as a critical ingredient for successful academic careers for faculty. Studies have demonstrated impacts on knowledge acquisition, improved clinical skills, enhanced efficiency, increased research interest, productivity, and improved job satisfaction.³ The presence of a mentor is highly predictive of a young academic investigator's attainment of higher levels of career development as measured by publications, grants, leadership, academic rank, income, and job satisfaction. Mentorship can also significantly influence faculty advancement, retention, and promotion.¹

For medical students, mentoring has also been shown to directly affect academic performance, choice of specialty, interest in research, and pursuit of an academic career. In a survey of new general surgery residents,

nearly 50% of residents indicated that mentoring in medical school played a primary role in the decision to pursue a surgical career.⁴ The Resident and Associated Society of the American College of Surgeons even correlated the reduction in medical student interest in general surgery to the decline in surgeon–student relationships and recent limitations on direct exposure to mentoring opportunities.⁵

The importance of mentoring to residents has been underemphasized in the literature. In a comprehensive review of mentoring across stages of training, only 4 of the 39 articles related to mentoring at the resident level.⁶ Anecdotal evidence indicates that residents seek out mentors in unstructured environments; however, numerous barriers exist, including time constraints, limited resources, insufficient academic recognition for mentors, and a lack of adequate mentor training. Furthermore, in an era where many of the brightest physicians are choosing private practice over academia, a more formalized method for encouraging mentorship may be helpful in retaining some trainees.

Mentoring is deeply rooted in neurology. Even as far back as the 19th century, strong mentoring lineages exist: Guillaume Duchenne de Boulogne (1806–1875) trained Jean-Martin Charcot (1825–1893), who later trained Joseph Babinski (1857–1923). Despite this rich history, a PubMed search of MeSH items “mentor” and “neurology” yields only 14 publications, 12 of which are historical accounts of influential neurologists. Of the 2 articles that review mentoring specifically, the first article describes the Educational Pipeline Program at the University of Pennsylvania, which is a fascinating program designed to bring

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neurology residents, medical students, and undergraduates together with local high school students to teach, learn, and help foster early interest in neurology and the medical sciences.⁷ The second is an editorial reviewing the impact of one neurologist's own personal mentor. A third article, not identified by this search, reviews the role of mentoring in sparking interest in pediatric neurology. In this questionnaire-based study, responders identified having a mentor as one of the most influential components that contributed to choosing a career in child neurology.⁸

While it is clear that resident mentoring does occur and may promote early career preparation for some, other residents struggle to find these opportunities, as particularly evidenced in investigation into interns, minorities, and women.⁹ Nevertheless, mentoring remains one of the most influential factors in the decision for residents to pursue academic medicine, and structured mentoring at the resident level remains vitally important, particularly for these groups. Some have raised concern about the future of academic medicine, particularly as it relates to declining interest in research, increasing financial disincentives, and continued issues for career progression among women. Residents are the future of academic medicine, and while mentors, advisors, and role models can be helpful for those residents pursuing private practice, mentors are vitally important for encouraging interest in academia, providing resources for productive research, advocating for minorities and women, and retaining the future of the field.

How can neurology programs begin to promote more resident mentoring? First and foremost, institutional buy-in is paramount. Anthony DeMaria, editor of the *Journal of the American College of Cardiology*, recently lamented the under-recognition of academic mentors and called for mentoring roles to be more highly regarded in academia.¹⁰ These same pressures abound in neurology, where limited salary support for teaching and mentoring, increasing demands for productivity, and the challenges of incorporating mentoring into promotional considerations have squeezed mentors out of the equation. A shift in priority will begin when a stronger emphasis is placed on training and developing faculty mentors. In this process, mentors must be clearly differentiated from advisors and role models. A mentor will offer knowledge and experience, guide the mentee in academic pursuits, provide opportunity for advancement and career development, and take an active role in the personal and professional life of the mentee. Institutions can show support through recognizing mentors at award selections and presentations, and when screening potential recruits. Resident teaching awards for praised faculty are not uncommon in many neurology departments. A resident mentor award may be an example of a small means of appreciating and encouraging such a mentoring presence. Most importantly,

dedication to and success in mentoring needs to be a promotional consideration for faculty.

One of the biggest challenges for resident mentees is finding a mentor. Systematic reviews of faculty have found that fewer than 20% of faculty members had a mentor and that women perceived that they had more difficulty finding mentors.⁷ While most believe that mentors should be self-identified and not formally assigned, many have indicated that guidance in finding a mentor would be helpful. A recent report by the Neurology Academic Advisory Committee described the use of an advisory committee or team of individuals as an adjunct to the individual mentorship paradigm.¹

At our institution, a combined approach has been developed such that young residents are advised by a Resident Advisory Committee comprised of a team of revered senior faculty members from a variety of specialties within neurology including neuropsychology, pediatric neurology, and others. This team of individuals not only provides the supportive framework necessary for transitioning to residency, but also is able to shepherd residents through the necessary steps for self-selection of a faculty mentor. We have considered additional or adjunctive approaches including involvement of a senior-level resident into this advisory structure to provide further resident perspective and facilitate a vertical continuum of potential advisors out of which mentoring relationships at multiple levels become possible. Our anecdotal experience is extremely positive in terms of feedback, research participation, and future career choices. We have observed tangible benefits for residents pursuing both academic and private practice careers.

CONCLUSION Mentoring is deeply rooted in neurology but increasing clinical, research, and administrative demands as well as relative undervaluing of mentoring by academic institutions challenge this tradition. Mentors should focus on helping their mentees with obtaining resources, personal and professional development, and being an advocate for academic medicine. Mentees should focus on identifying an appropriate mentor or mentors. Residency programs should more formally structure a process necessary to achieve this goal and medical schools should recognize the value of mentoring in faculty promotion proceedings.

AUTHOR CONTRIBUTIONS

Dr. Strowd: drafting/revising the manuscript, study concept and design.
Dr. Reynolds: drafting/revising the manuscript, mentoring the corresponding author.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

Dr. Strowd serves on the editorial team of the Resident & Fellow Section of *Neurology*®. Dr. Reynolds reports no disclosures. Go to Neurology.org for full disclosures.

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Neurology 2013;80:e244-e246

DOI 10.1212/WNL.0b013e318298c247

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