## Rocking the Match II: More Lessons on Applying and Getting Into Residency

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In 2007, one of us (R.C.Z.) published an article in the *Journal of the National Medical Association* entitled "Rocking the Match:' Applying and Getting Into Residency,"<sup>1</sup> which provided students with tips from "an insider" on how to be successful when applying for residency training. The article seems to have been helpful to many students, and was featured in a recent article posted on the Student Doctor Network (http://www.studentdoctor.net/2009/06/the-successful-match-interview-with-dr-roy-ziegelstein/).<sup>2</sup>

Recently, a student at Howard University College of Medicine in Washington, DC (O.M.) e-mailed R.C.Z. at the end of his first year and noted, "I was reading over some articles online, and I came across the article you wrote called 'Rocking the Match'..., man that was AWESOME. I plan to incorporate as much of what you wrote in that article as possible..."

About the same time, another student (E.M.) who just finished her first year at Morehouse School of Medicine in Atlanta, Georgia, contacted R.C.Z. about another matter. She noted that she had not yet read the article but had acquired some information about how to achieve professional success from her participation in a program she completed after graduation from college intended to prepare minority students for doctoral studies. She also said that she learned "...from conferences, speaking with professionals, and from personal experiences."

The e-mails offered an opportunity to assess how the advice provided in "Rocking the Match" might influence the opinions and actions of 2 "representative" underrepresented minority medical students. For this reason, a 10-

item questionnaire was given to these 2 medical students regarding issues important to the residency application process. Their responses to these questions form the basis of this article and are provided below, with commentary from R.C.Z., and are summarized in Table 1.

1. What are some strategies you might use to find a mentor, either one who can provide general career guidance or one who is likely to be helpful in the specialty area that you eventually choose?

E.M.: I would send them an e-mail stating my goals and the reasons why I believe he/she might be a suitable mentor for me. Then I would attempt to schedule a meeting with him/her.

*O.M.*: I would speak with other medical students, preferably third- and fourth-year students, and ask them about which faculty member is the most useful in guiding students through the proper steps needed for a successful residency match. I could further narrow my search by speaking with other senior medical students going into my specialty and finding out which mentors were the most helpful. I would find out which faculty members won the previous teaching awards.

*R.C.Z.:* Although the vast majority of medical students acknowledge that mentors are important, research shows that only a minority of fourth-year students have  $1.^3$  Interestingly, O.M. noted that before he read "Rocking the Match"<sup>1</sup> he had the following opinion about mentors: "I used to rarely pay attention to mentors because I thought that only students performing poorly or failing their courses really needed mentors."

The best mentor for a medical student gets to know the student as an individual in order to establish a personal connection with him or her. This allows the mentor to provide advice in the student's best interest rather than being guided by preconceived ideas about what would be best for the student.<sup>4</sup> The quality of a mentor is defined by the mentor-student relationship rather than by any particular quality of the mentor himself or herself. A student may therefore have to

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form relationships with several mentors before building a relationship that is productive. It is reasonable, therefore, to "try on" mentors from different backgrounds and with different characteristics. A useful way to start finding a mentor, as previously noted,<sup>1</sup> is to ask students more senior to you to let you know of faculty with reputations for mentoring students or to approach faculty who have won awards for mentoring or teaching medical students. 2. What can you expect from your mentor with respect to helping you with your professional development, and what are your roles and responsibilities in the relationship?

*E.M.*: I expect my mentor to offer advice regarding career decisions. I expect my mentor to assist in opening doors that will benefit my professional development. I expect my mentor to invest in my career development on

Trigger Question	E.M.	O.M.	R.C.Z. Commentary	
How do you find a mentor?	Send an e-mail and schedule a meeting.	Get recommendations from senior students or pursue award-winning faculty.	You may have to "try on" different mentors to find the right one.	
What do you expect from your mentor and what is your role in the relationship?	The mentor should provide career advice and open doors. I should keep the lines of communication open.	The mentor should provide advice. I should be actively engaged in the relationship and make regular appointments.	You must take an active role to get the most out of the relationship.	
How can you make sure others recognize your accomplishments?	Be involved in extracurricular activities and include them in my profile.	Constantly review and update my résumé and use my mentors to review my résumé and personal statement.	Don't be shy.	
What should you include in your CV?	Academic honors, research experience, publications, volunteer work and professional affiliations.	Name, contact information, career objective, education, membership organizations, awards, work experience, research experience.	What to put in a CV is well-known to students; how to put it together seems more challenging.	
How important are test scores?	Important.	Important.	Important.	
How do you decide whom to ask for letters of recommendation?	Ask someone who can write a strong, personal recommendation.	Ask people who know me very well, and possibly write about my different strengths. Consider someone who has mentored many students.	Don't just go after the most well-known faculty member. Find someone who knows you well.	
How do you ask for a letter?	E-mail or call and ask for an appointment to meet. Ask if the person can provide a strong letter.	Make a formal appointment and ask the person if he/she knows me well enough to write a strong letter. Provide my personal statement.	Make an appointment and provide the writer necessary information.	
How can you tell if a program values diversity?	Spend time there, perhaps during a rotation and see how the house staff feel about the program.	When visiting the program, check to see if there are people similar to me in personality or race who are succeeding in the program.	Reach out to minority house staff/ faculty to see if they feel valued and comfortable in the environment.	
How do you prepare for your interview day?	Research the program beforehand and talk to someone in the program if possible.	Have a mock interview with my mentor, asking him/her to critique my responses, speech, body language, and ability to engage.	Prepare beforehand and think about how to present yourself. Rehearse with your mentor.	
Do you contact someone after they interview you? If so, what do you say?	E-mail and indicate that I was pleased to meet the person and express interest.	Send the person a letter or e-mail. Specifically indicate what it is about the program that interests me.	Personalize the letter and describe specifically why the program is right for you and vice versa.	

a personal level, helping me make decisions based on my personal as well as my professional goals. It is important for me to maintain the relationship in terms of keeping the lines of communication open.

*O.M.:* I expect my mentor to provide me with excellent advice as to the steps and decisions I need to take, at every stage of my medical school life in order to eventually be successful in my residency application. My responsibility within the mentor-student relationship goes beyond excelling in my academics. My main responsibility to my mentor is to be actively engaged in the relationship such as asking questions whenever I need help, finding out his or her office hours, and making regular appointments for assistance on issues ranging from writing a personal statement or letter of recommendation, to discussing my career goals and objectives, and seeking suggestions on how to successfully position myself to meet these goals.

*R.C.Z.*: It is true about many things in life that "You'll get out of it what you put into it." This is most certainly true of relationships with mentors. Medical students cannot wait for mentors to initiate contacts; students have a responsibility to cultivate mentoring relationships

themselves.<sup>4</sup> Recently, the responsibilities of individuals who are being mentored were outlined in an article entitled, "Making the Most of Mentors: A Guide for Mentees."<sup>5</sup> The guide includes a useful "checklist" on how to prepare for the relationship, how to identify mentor(s), and things to look for in a mentor. The authors also review the key characteristics of the relationship, including the first meeting, cultivating the ongoing relationship, and ending it. The major message of this guide, and one that I would echo, is that medical students must take an active role to get the most out of the mentormentee relationship.

3. Many medical students feel that they will be evaluated highly when they apply for residency if they have good grades in school and on standardized tests. What kinds of things can you do to make sure that others recognize your accomplishments?

*E.M.:* Besides academic performance, I believe you as an individual have to standout. This is where extracurricular activities come into play. Community involvement and leadership positions are some of the things that complement your academic profile when applying for residency. To ensure that residency programs recognize

Reference	Dean's Letter	Recom- mendation Letters	Inter- view	•	Perform- ance in Subinternship n Specialty Area		USMLE Scores	Member- ship in AOA	Research/ Publications
Janis and Hatef <sup>®</sup>	Low	Med	High		High	Med	Med	Med	Low
Melendez et al <sup>9</sup>		Med	High				Med	High	Low
Taylor et al <sup>10</sup>	High		High			Med	Low		
Green et al 11		Med		High	High	Med	High	Low	Low
Otero et al <sup>12</sup>	High	Med		Low		High	High		Med
Crane and Ferraro <sup>13</sup>		Med	High	High	High	Med	Med	Low	Low
Bajaj and Carmichael14	Low	Med	High		High	High	Med		Low
Wagoner and Gray <sup>15</sup>	High	High	High		Med	Med	Low	Med	Low
Wagoner et al <sup>16</sup>	Med	Med	High	High	High	Med	Low	Low	Low
DeLisa et al <sup>17</sup>	Med	High	High	High	Med	Med	Low	Low	Low
Bernstein et al <sup>18</sup>	Low	Med	Med			High	High	Low	Low

Abbreviations: AOA, Alpha Omega Alpha; USMLE, United States Medical Licensing Examination.

The designations noted are based on the rankings of variables in each article cited, with "high" referring to the highest tertile of evaluated variables and "low" referring to the lowest tertile.

your accomplishments, make sure to include them in your profile.

*O.M.: Focus on my resume.* By constantly reviewing and updating my resume, I ensure that my list of accomplishments is well organized and ready to be presented whenever the need arises. I can use my résumé as a tool to highlight my individual qualities.

*Make use of my mentors.* I could have my mentors read my résumé and personal statement, to make sure that they are as good as they can be. More importantly, by having my mentor work on my personal statement, they will gain a more thorough understanding of who I am—my abilities, accomplishments, and motivation. Using my mentor will come in handy when I request my mentor to write me a letter of recommendation.

*R.C.Z.*: As I suggested in "Rocking the Match,"<sup>1</sup> don't be shy about featuring your accomplishments in your application. There is a fine line between modesty and braggadocio, but I think most medical students applying for residency tend to be on the modesty side of that line. If you don't tell the person reading your application about what you've done, he or she may never learn about it. Don't worry about having something appear in several places in your application. Repetition is an effective way for people to learn.

With that in mind, it is worth repeating another point from "Rocking the Match."<sup>1</sup> The ability to effectively promote one's self is an important skill to develop, and it may be particularly important for members of minority groups. It is not that those in the minority are less skilled at selfpromotion, it is that they may have to speak even louder than those in the majority to be heard. This is suggested by the fact that medical school faculty who are members of minority groups are promoted at lower rates than their majority counterparts and are less likely to hold senior academic rank, even after adjusting for time on the job and for accomplishments.<sup>6</sup> My advice is simple: don't be shy.

4. When you apply for residency near the beginning of your fourth year of medical school, you will be asked to provide your résumé or curriculum vitae (CV). What kind of things should you include in your CV, and how do you go about putting one together?

*E.M.:* Your CV should include things such as academic honors, research experience, publications, curricular activities relevant to your professional development, volunteer work, and professional affiliations. There are online sources that offer CV templates. It is important to have your CV reviewed and compared against that of someone else in your field.

*O.M.:* Things to include in my resume are my name, contact information, career objective, education, membership

in organizations, awards, work experience, research experience. Putting a resume together should be a concerted effort between mentor and student. I would come up with a draft résumé and then continuously ask my mentor for feedback and suggestions. When writing a résumé, it is important that my mentor read my résumé to make sure that I haven't crossed the line between self-promotion and having an exaggerated opinion of myself.

*R.C.Z.*: Most medical students seem to know the things to include in a CV. As E.M. notes, there is a lot of information about this available on the Internet (eg, http://www.thedoctorjob.com/careercorner/view\_article.php?id\_article=12).<sup>7</sup>

What may be less well known, though, are the steps necessary to put one together, and the perils of waiting until the time of residency application to compose a CV. As discussed in "Rocking the Match,"<sup>1</sup> the process must begin early, and the CV updated regularly.

5. Most people know that most outstanding doctors have diverse interests and skills, are excellent communicators, and exhibit humanity and compassion at the bedside. It follows that residency programs take many of these things into consideration when evaluating candidates. When you eventually apply for residency, how important do you think your test scores will be to those who evaluate you?

*E.M.:* Depending on the residency program, test scores are important to get your application looked at or ranked. Test scores play a role in securing an interview. Once the interview is guaranteed, a more well-rounded representation of the individual plays a bigger role in securing the position.

*O.M.:* Among other things, my test scores are extremely important, especially US Medical Licensing Examination (USMLE) scores to getting into the top residency programs. As stated in "Rocking the Match," before getting invited for interviews, I am essentially nothing but a piece of paper. The impressions of residency programs of who I am will be strictly dictated by how well I perform on the USMLE, my performance on clinical clerkship, and my class ranking. In other words, my test scores are a key factor to getting the attention of residency programs; I could be the most loving person on the planet, but without good scores, I will never get the opportunity to showcase it to the residency programs.

*R.C.Z.*: The importance of performance on tests was emphasized in "Rocking the Match"<sup>1</sup> and seems to be well known to most students. We reviewed 11 articles that discuss the importance of various aspects of the residency application.<sup>8-18</sup> Although all evaluated the interview as being very important in the process (Table 2),

students must recognize that the interview won't even happen unless the application is viewed as being worthy of an invitation. Whereas there is considerable variability in what is viewed as important, it is clear that research and publications are not considered important in most of these studies. As shown in Table 2, the value placed on performance in the core clerkship in the specialty area and scores on the USMLE was somewhat variable. The largest study,<sup>11</sup> which was based on the responses to questionnaires from more than 1200 residency program directors in 20 medical specialties, rated these 2 aspects of the application the highest. The 4 most important criteria noted in this large national survey were grades in required clerkships, USMLE Step 1 score, grades in senior electives in specialty, and the number of honors grades. Of note in most studies that commented on this specifically, performance on USMLE Step 1 was considered more important than performance on USMLE Step 2,8,11,14 and performance in the clinical years was valued more highly than performance in the basic sciences.<sup>11,13,15-17</sup>

# 6. Many residency programs ask for 3 letters of recommendation in support of your application. What considerations go into determining whom to ask for these letters?

*E.M.*: Who the person is, what position they hold (ie, a physician currently in the field, a researcher/professor, or another professional), and what my relationship is with this individual. I would consider in what capacity the individual knows me, personally, professionally, or both. Most importantly, I would ensure that said individual can provide me with a strong, personal recommendation.

*O.M.:* In determining whom to ask for letters of recommendation, I would select faculty members that know me very well and can confidently attest to my abilities. It is important that I choose individuals that can insightfully write letters about my skills. For example, one letter writer could write about my clinical and scientific proficiency, the other could write about my humanitarian qualities by describing my volunteer activities, and another could still write about my leadership skills.

When choosing who to write my letter of recommendation it will be wise to select an older faculty member (mentor) to write a letter for me. This is because older faculty members have more than likely mentored a lot of students over the years; therefore, their opinions tend to carry much more credibility.

*R.C.Z.*: Studies suggest that letters of recommendation are viewed as being at least moderately important in the evaluation of residency applicants (Table 2), and perhaps even more so.<sup>19</sup> This is quite curious, since there is widespread agreement that the way letters are generally written makes it difficult to distinguish among candi-

dates,<sup>19</sup> with so many superlatives used that almost all applicants appear to be outstanding.<sup>20</sup> The emphasis placed on letters of recommendation in the evaluation of applicants is also interesting, since there is significant variability in how these letters are interpreted by faculty readers.<sup>21,22</sup> and there seems to be little correlation between these letters and residency performance.<sup>23-25</sup>

It seems safe for medical students to assume that, unless or until they are eliminated from residency applications (which I believe is not likely to happen), letters of recommendation are important in the process. Medical students often work hard to try to get the most wellknown faculty member at their institution to write a letter of recommendation for them, even if that individual doesn't know the student well. This practice should be avoided. The degree to which the letter writer knows the student (ie, "depth of understanding") is far more important than the author's academic rank or institution.<sup>19</sup>

## 7. How would you ask a faculty member at your medical school to write a letter of recommendation in support of your application?

E.M.: I would send them an e-mail or call them asking to meet with them in person, if possible. I would prefer to ask them in person, but if it is not possible, e-mail followed by a phone call might be the best way to communicate my request. I would make sure to ask them if they can provide me with a strong recommendation for whatever program I am applying to.

*O.M.:* Asking for a letter of recommendation should be done in a formal and professional manner. I would first make an appointment with the faculty member and then ask if he would be willing to write me a letter of recommendation. Before requesting a letter of recommendation, it is imperative that I ask the faculty member if they know me well enough to write a strong letter of recommendation. In addition, I could assist the faculty member in writing the letter of recommendation by providing him with a copy of my personal statement.

*R.C.Z.:* As I wrote in "Rocking the Match,"<sup>1</sup> letters of recommendation should not be asked for casually. The student should ask to schedule a meeting with the prospective letter writer and come prepared with a CV and other information that might be helpful (eg, grades in school, if the student wants the writer to mention this, and the writer does not have easy access to the medical school record). If the student does not have his or her personal statement ready, a meeting in which career goals and objectives and those for residency training are discussed is very helpful.

8. What can you do to determine the value a residency program you are applying to places on having a diverse house staff and the degree to which it provides an

## *environment in which minority interns and residents can succeed?*

E.M.: I would have to spend some time there, maybe during my rotations. Develop a relationship with the house staff that will enable me to decipher how they feel about the program.

*O.M.:* When visiting the residency program, I would check with the interns, residents, and program directors to see if there are people similar to me in terms of personality or race, succeeding in the program. I could also observe the number of minority students, faculty and staff, in the residency program. Finally, I would check to see if the residency program has a minority affairs office; if so, I would visit the office and speak with the program leader to ask about the types of minority programs offered at the residency program.

*R.C.Z.*: Aagaard et al<sup>26</sup> performed a cross-sectional survey of fourth-year medical students applying to internal medicine residency training programs in 1999. The authors obtained data from more than 1000 applicants who were asked to rate the importance of 46 factors in choosing a residency program. The most important factors cited were good house staff morale, the academic reputation of the program, a positive interview experience, the variety of clinical experiences, and location near spouse or significant other. Of interest, controlling for gender, marital status, age, and class rank, minority applicants rated several factors as being more important than did their Caucasian counterparts. These included opportunities for serving the medically underserved; amount of minority recruitment; feeling of being wanted; and the ethnic diversity of the city, patients, house staff, and faculty. An academic environment supportive of ethnic minorities and a political climate supportive of minorities were also noted as more important to minority applicants.

So how can you assess a residency program's "performance" in some of these important areas? Spending time during a rotation and/or developing a relationship with the house staff are clearly good ways to determine if a residency program values diversity. It will familiarize you with the composition of the house staff and determine whether minority house staff and faculty are in leadership positions, or at least given these opportunities. It will also allow you to speak with minority house staff and faculty and assess the degree to which they believe they are valued and comfortable in the environment. The problem is that you will not have the opportunity to do a rotation at every program you apply to, so you must try during your interview day (and in subsequent correspondence) to develop relationships with house staff and faculty in which you feel comfortable asking about potentially sensitive information and in which they feel comfortable providing this information candidly.

## 9. What are some steps you can take to prepare for your interview day?

*E.M.:* Make sure I know the program I am applying to well. Make sure to research the specifics that attract me to that particular program and to research successes and accomplishments of its students as well. It might help to talk with someone already in the program.

*O.M.:* To prepare for the interview day, I could have a mock interview with my mentor. I would have my mentor critically analyze my response to questions, how much I talk, my body language, my ability to engage my listener, and whether or not I sound passionate about my interests. I would also make sure to properly plan the logistics of getting to the interview site. It is important that I have a contingency plan in case an unexpected emergency or event develops. The last thing I want is to miss my interview.

*R.C.Z.:* It is uncanny to me that so many medical students go into their interviews without having rehearsed beforehand, and sometimes without even having thought about some of the questions they might be asked. Medical students will often hear about stories of people being asked to open windows that are nailed shut, but in reality residency program interviews are generally quite "gentle." Yet despite their being relatively low key, it is clear (Table 2) that they continue to be among the most important issues considered by residency programs in the evaluation process.

Interviews can be, and should be, prepared for. Every student should rehearse before being interviewed, preferably with a faculty member. The ground rules of the rehearsal should be made clear. Criticism should be expected and welcomed, since it is better experienced during a rehearsal than on the evaluation of a real interview. Dr Mary Frances Lyons wrote a 2-part article on interviewing that is intended for physician executives,<sup>27,28</sup> but contains important messages for medical students as well. She describes 4 common mistakes on interviews that I have seen intern applicants demonstrate: (1) lack of energy or enthusiasm; (2) poor eye contact; (3) answers that are too long; (4) answers that are too vague. One of Dr Lyons' messages is particularly relevant to applicants for residency programs. She advises that people "write your own commercial." Dr Lyons suggests that those being interviewed write out a 5-minute overview of who they are, what they have accomplished, and what they want to do next. She advises that individuals learn this "commercial" so they are able to deliver it in a relaxed and sincere manner. Dr Lyons also suggests that those being interviewed prepare by role playing, something that is also suggested in "Rocking the Match,"1 and that they consider being videotaped beforehand. Although it may be time consuming and challenging to

arrange a videotape of a mock interview, this was considered by medical students to be the most helpful part of a mini-course on interviewing skills offered by Dartmouth Medical School in the late 1980s.<sup>29</sup>

10. There are various settings during medical school that involve your meeting with people who may be evaluating you. For example, you may meet for the first time with a potential faculty mentor, you may be applying to the director of a laboratory for a research position, or you may be applying for internship. How likely are you to send such an individual an e-mail or letter after meeting them? If you do, what will you say in that e-mail or letter?

*E.M.:* It is very likely that I will send them an e-mail after meeting. First, I would introduce/reintroduce myself. Then I would express my pleasure in meeting them and my interest in whatever program it is they are involved in.

*O.M.*: If I am applying for a position that I am very much interested in, I would send my interviewer a letter or e-mail after meeting with them. In my letter I would express my love for their program by specifically telling them what it is about their program that interests me and also how I would love to one day share my enthusiasm and passion by working with them in the future.

*R.C.Z.:* As I wrote in "Rocking the Match,"<sup>1</sup> if you decide to send a thank you letter or e-mail after an interview, it should stand out from others. The letter should clearly communicate why you feel the program is a great fit for you and describe what the program offers (be specific!) and why it is a great fit for your goals and objectives for residency training (be specific!) Recently, I found some suggestions online for after-interview thank you letters that I think are particularly helpful (http://jobsearchtech. about.com/od/resumesandletters/a/thankyous.htm).<sup>30</sup>

The article provides 6 suggestions for thank you letters that are very relevant to the residency application process: (1) express your enthusiasm, (2) address unresolved points, (3) personalize it, (4) reiterate your expertise; (5) highlight your successes, and (6) proofread for typos and grammatical errors. I think one of the most important suggestions here is to personalize the letter and thereby set yourself apart from the other candidates.

#### SUMMARY

Everyone can think of someone who was just plain smart and who did really well in school without even studying. On the other hand, we all know that most good students work at it, even if they are very bright. In the same vein, there are some students who don't have to prepare for the application process. They may be good applicants for residency training based solely on their academic record, the support they will receive from faculty, and on interpersonal skills that will allow them to shine during an interview. However, there aren't a lot of people like that. The major message to medical students reading this article is that becoming a good applicant for residency training, and indeed for other things in life, is a learnable skill. The responses of the medical students to the 10 trigger questions in this article demonstrate that. We all hope that the tips we provide here will help many students achieve the level of success they deserve.

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