Grayden MacLennan Mentoring Activity August 6, 2015

## **Mentorship in Medical Dosimetry Education**

The process of training and developing new talent in any field is critical to the health of the profession and the stakeholders it serves. Lackluster training can produce employees who are not engaged in their work or who do not know how to perform all of the tasks that their work requires. Some will thrive because of their own motivations, but many will founder because their training has not adequately prepared them. The medical dosimetry field is no exception. The huge quantity of didactic knowledge and clinical proficiency that graduates are expected to have mastered by the end of their training is staggering, and an effective system of training and evaluation is critical for ensuring that new medical dosimetrists will not enter the field unprepared.

Mentorship is one aspect of training that can be overlooked. A didactic course can teach facts, and clinical experience can teach reactions, but an industry's values or an organization's culture are best instilled by an involved mentor who takes the time to build a relationship with a student at a personal level.<sup>1</sup> A mentor is a type of teacher, but rather than reciting facts, a mentor teaches a student how to build a framework for arriving at their own answers to problems. Mentors build confidence by bringing students into an organization's inner circle, where they are encouraged to share their ideas as peers and ask questions without fear of appearing weak or unknowledgeable. This process of encouraging engagement rather than passive absorption produces students who embrace curiosity by trying multiple approaches rather simply performing tasks robotically without full understanding.

When a mentor shows true interest in the personal and professional development of a student, those same values are passed along to the student. While students are learning all of the required materials, they are also building an image of what kind of professional they would like to be in their career. In this way, the motivations explaining why medical dosimetrists do the things they do become clear. Students are not simply learning what to do, but why they do it.

The development of a relationship between a mentor and a mentee is not always an easy one-size-fits-all process. In order for students to feel accepted by a group, they must find mentors who appear to share common goals and interests.<sup>2</sup> There are innumerable types of personalities,

but some organizations have found success using tools like the Meyers-Briggs profile to match potential mentors and mentees based on common groupings within the system. The Meyers-Briggs tool analyzes broad categories such as interaction style, learning style, and information processing style, so matching people who operate on the same wavelength can help them connect with each other.

Along my path towards becoming a medical dosimetrist, I have had exposure to many instructors and a few mentors. There is not always a clear line between one and the other, and relationships can be fluid. A teacher one month may feel like a mentor for a few months, and then a teacher again if the curriculum moves on. In interviews with my teachers and mentors at Loyola, this trend has appeared several times. Mentors and mentees may move apart based on life events such as moving to a new institution or retirement (John Roeske, Oral Communication, July 3, 2015) and as the mentee progresses in their career, they may pull up alongside their previous mentor, who is now an equal.

Relationship building and the ability to collaborate effectively with others also comes from mentorship. These are critical components of a thriving industry that is not in a state of stagnation. It is my hope that as I continue through my career, I can become a mentor to others so that I can continue this cycle of growth.

## References

- Lenards N. *Mentoring*. [SoftChalk]. LaCrosse, WI: UW-L Medical Dosimetry Program; July 14, 2014.
- Trad ML. Mentoring radiation therapy students: a review and survey. Rad Therapist. 2009; 18(2): 101-108

## Appendix A

Grayden MacLennan

Mentoring Interview with John Roeske (Transcript)

July 3, 2015.

Q: Generally speaking, what does mentorship mean?

A: Good question. I think it means having someone you can teach, help through the rough paths, share your wisdom, share your experience. Conversely, if you're the mentee, someone that you can refer to; people who have gone through similar things that you can do so that you're not reinventing the wheel. You're gaining from their experience.

Q: Do you recall some of your first experiences in receiving mentorship?

A: Yes, I had a professor in college who was very helpful, very instrumental to getting me into the field. He guided me along this path, got me into medical physics. Obviously my PhD advisor was a good mentor too. When you're going for a PhD you're doing a lot of research and you need someone to help you navigate these pathways. Those are probably two people I've had early in my life.

Q: Now that you're a faculty member and it's your job to be a mentor, how do you approach providing mentorship to other people?

A: Generally, I mentor the junior physicists in the group, the younger folks. What I try to do is kind of meet with them on a regular basis, kind of hear from them what their problems and issues are, and offer them advice. It's kind of like steering a ship through a storm, trying to say "this is what has worked in the past, and you might kind of want to do this or that or not do this or that", which is equally important.

Q: Do you have any advice for people for how to find good mentors?

A: Trial and error. \*laughs\* It's hard to say. A lot of times it's hit or miss. It's somewhat of a personal relationship with them. If it's someone like your boss you may be forced to have them as a mentor, but a lot of times people go outside their immediate network and find mentors. Like I said, someone that clicks with you. Maybe you have similar interests, similar background. Someone who has maybe gone through something that you are trying to do yourself and they've been successful at it.

Q: So mentors don't have to be in the field that you're in?

A: They don't have to be necessarily. I had a situation when I was a young faculty member at the University of Chicago. My main mentor left. And there were no really good mentors in our department. Basically, I and a good friend of mine who was a physician, about the same age and status in terms of faculty, we became each other's mentors. That's another route, almost like peer mentoring. We bounced ideas off each other and eventually we did become each other's mentors. That's another way to go about doing it. Obviously the thing you miss out the most on is experience because neither one of us had the experience, but you figure that two heads are better than one. If you put your heads together, you can navigate your way through a lot of these things. Q: Can that concept be applied if someone finds himself in a clinic where they don't really feel that they have a good mentor available to them, what are some ways that they could look outside the box or look in other areas to find mentorship?

A: Obviously you could look in other areas, but where it becomes a little difficult is when you're looking for a dosimetrist as a mentor, would you go to a nurse? Probably not, because you have very different experiences and it probably wouldn't work too well. You would probably go to someone a bit closer to your field, maybe someone in physics for example. In your case, being a student, they could be somebody who is a little bit older than you, who has gone through and is done being a student. Ideally you'd want somebody who has passed boards because they can help you navigate through that. That's kind of a challenge. How do you study for boards? How do you prepare and what are the things to look for? It doesn't have to be someone who's been in the field for 20 years. It could be somebody who is relatively young, but a little bit ahead of you. Q: Do you think that there is any value in having a few really good mentors versus lots of so-so mentors? Is there a pattern, or is any mentorship good?

A: Primarily the thing that you want is someone that you personally click with. If you have a bad mentor that's not any good. It's a waste of your time and it's a waste of their time. You have to have someone that you have a connection with. In terms of number, you probably don't want too many. You don't want to get a lot of conflicting advice, because everyone is going to have their own opinion about how to do something. A lot of times people have maybe one mentor or two mentors, and it might be for different things that you're doing. Maybe you have one who's more clinical, and if you're interested in research or in education, someone with more of those experiences. In that case you could benefit from a couple.

Q: If you have two mentors and they tell you exactly opposite things, how do you reconcile that?

A: Good question. I don't know. Flip a coin? \*laughs\* I think at the end of the day it's up to you to take in what your mentor says or suggests. No one is going to make you do certain things. You take the best of both worlds and maybe you come up with your own answer. One thing you have to be very careful of though, another story, is that this colleague and I, who were each other's mentors, we had a very senior member of radiation oncology who was a very famous person. We had gotten to a point where we said "can we show you what we are doing?" The danger of someone like that, who is very famous, is that if you ask for their advice, you better follow it, or else they will think "why am I wasting my time with you?" That's always something to think about.

Q: Do you still actively seek out mentorship? Who are your current mentors?

A: I have not actively sought out mentorship. My mentors are both older, retired, so I have not really had time to seek anyone out. You get to a point where you're busy mentoring other people. I'll go to other people for advice on certain things, but I wouldn't necessarily call them mentors. More sounding boards, I would say.

## **Appendix B**

Grayden MacLennan

Mentoring Interview with Jen Price (Transcript)

July 5, 2015.

Q: What does mentorship mean to you?

A: I think mentorship means helping someone find the right way, maximize their potential, and figure out how to find the right answers themselves, whatever they're trying to do. Not giving them the answers but helping them figure out how to find the answers or work through in their head to get the answer.

Q: Do you recall any of your early experiences in mentorship from your past?

A: I do. I've had some great mentors in my life, which I'm thankful for. A lot of people helping me figure out the right path, figure out what to do, figure out what the right answer is, which I think is crucial specifically to our job. There isn't always one right answer. There are lots of right answers. I had a lot of people help me figure out my own way to do things, taking little bits and pieces from everyone to figure out the way I like to do things.

Q: Now that you are a mentor, have you developed a specific approach to providing mentorship? A: Again, I feel like when someone asks me a question, just telling them "click here, do this" is not the best, but asking them a question to get them thinking about the answer for themselves versus telling them the answer. Getting someone to think about things themselves, or think about things critically in order to get the answer, because if you get the answer yourself, it's much better than me telling you what the answer is.

Q: If someone is in a situation where they don't have mentors available, what's a good way to seek out mentors? How do you manage that search process?

A: A lot of times I think it's the more and more people you talk to, the more networking you do, you're going to find someone who had someone interact with them that will then help you. In careers, for example, the more people you talk to in a certain career, you're going to find everyone knows 5 more people and those 5 more people know 5 more people, and networking is probably the best way to do it.

Q: In terms of numbers of mentors, do you find that it's better to have a few high quality mentors or lots of people who are sort of medium useful? Is there a sweet spot?

A: Personally, I think there's probably value in having a few really good, versus a lot of totally fine but maybe not really good mentors. Definitely I think more than one. Even a handful would be best because everyone has a different approach. Everyone has a different take on things. By taking a little bit from everyone you're going to get your own way of doing things, your own idea. I think a few is good. One is not the best but fine. I do think having a few really good ones would be better than a whole handful of maybe not quite as strong.

Q: What happens if you have mentors telling you opposite things, saying "this is where you need to go with this"?

A: Everyone has their way of doing things. Everyone has an opinion. There's lots of ways to get to the same endpoint. The key is trying everyone's way of doing something to figure out your own way, taking a little bit from everyone. Maybe your way is the exact same as someone else's way and that's ok too. It doesn't really matter, but especially when you're learning I think you have to try everything that someone suggests or at least try to try everything that someone suggests until you get your own way, whether that be taking a lot from a lot of people in a specific task or just finding that you think the same as one person and just choosing to take their path.

Q: Do you still seek out mentorship or do you have current mentors?

A: I think specifically in our career, it's all the time, every day, with each other, with people who have been doing this longer than I have, with people who haven't been doing this longer than I have. People who are newer maybe have newer takes on things that I didn't know because I haven't done that in a while. I think it's important to have someone to look to for guidance and advice or at least to bounce ideas off of. Whether or not you do it that way or not, bouncing ideas off of anybody will help you get your own mind churning as to whether there's a new way to try something.

Q: Do you have mentors outside our local group that you really like to seek out for advice? A: Yes. Not as much as I do with people in our own group just because we have a strong group, but yes, there are definitely people I have learned from along the way, wherever I've been, who I still talk to, still contact, just because everyone does things differently and the more we can take in the better we'll be because nothing is cookie cutter about our job. The more ideas we have, the better off we are.

Q: Do you have any advice for somebody who would like to eventually be a mentor?

A: Across the board, no matter what you're talking about, career or other, any time you can get someone thinking for themselves, not only is that going to get the brain churning and thinking of something, but build people's confidence too. If they figure out how to get to the right answer on their own, it's only going to build their confidence as well as help them find the right answer. Getting people to come up with the answer for themselves and maybe getting them to work a little bit harder or struggle a little bit to get there in the long run will be better, although in the short term it will be harder. That's probably how I learned, so maybe I'm biased to that for that and that's how I feel confident that I know what I'm doing because I struggled to find out how to do what I'm doing. Figuring out how to problem solve and think through a process is always going to be more important than just giving someone the answer.

Q: Can you describe for me the transition. Did you ever have an "ah-hah" moment where you switched from being a mentee to being a mentor?

A: I still feel like I have that today, now, to be honest with you. When you do something and you work through something, you're like "this is really good. Man, I did awesome!" It takes a while. You slowly build your confidence, and you slowly build that confidence in different things. Simple things early on in your career path you could tell somebody what to do or "I could help you with that". Later on you feel like "I need to get somebody who's done this once or twice to help me work through this. Maybe not even to tell me what to do, but just to brainstorm together to figure out how we're going to get there. I don't feel like there is an "ah-hah" moment because I still feel like even today when random things come up that I haven't seen myself, even I look for advice or for someone else to talk it through with me in order to get the best possible solution that we can come up with together. Just time, and building your confidence helps you become the mentor from being the mentee.