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A Sustainable Course in Research Mentoring

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“For most of us laboring behind the ivied gates of academe, the career contributions that will hold the greatest meaning —those that will sustain us long after our careers end—will be relational. In the end, I propose that more of us will count protégés and relationships than articles, grants, and courses delivered.”¹

Introduction

Mentors play an important role in the education and training of early career scholars in clinical translational science. They provide instruction concerning scientific content, individualized advice and critique, socialization, career counseling and entry into professional networks. Numerous articles describe the attributes of the best mentors.²⁻⁴ Although such descriptions are valuable, they do not explicitly address how these mentors acquired the knowledge and skills needed to attain “award-winning” status; nor do they discuss means through which a ‘practicing mentor’ can improve their mentoring skills.

With the creation of the Clinical Translational Science Award (CTSA) program in 2006, the National Institutes of Health set the goal of establishing a network of ‘academic homes’ to support, train, and educate the United States scientific workforce for translational sciences.⁵ The CTSA program currently includes 60 institutions in 35 states that have formed a consortium to achieve its strategic goals; one of which is training and career development of clinical and translational scientists. This consortium has created frequent opportunities to study educational practices in the field of research education including the preparation, support and evaluation of research mentors (<https://www.ctsacentral.org/about-us/ctsa>). Through a semi-structured national interview of 46 CTSAAs initially funded in 2006 through

2009, Silet et al.⁶ found considerable variation in mentoring practices for KL2 scholars (junior faculty) and limited consensus about the core elements of effective mentoring practices and ways to prepare and train mentors. Reasoning that many programs lacked access to a mentoring curriculum; Pfund et al.⁷ conducted a randomized controlled trial of an intervention based on the *Entering Mentoring* curriculum at 16 recruited CTSA sites and found it effective in helping clinical and translational science mentors gain confidence and skills in their mentoring practice. One drawback of this curriculum is the totality of time required for face-to-face meetings of the mentors, “totaling four, 2-hour sessions with groups of 6-14 mentors spread across 2 months.”⁸ We report results of our brief and sustainable mentoring course for clinical translational mentors to address CTSA educational objectives established as part of the University of Rochester's Clinical Translational Science Award. The instructional framework of the course includes an online component and one 2-hour seminar.

The overall objective of the University of Rochester Clinical Translational Sciences Institute (UR-CTSI) mentoring course is to introduce the commonly agreed upon attributes of mentoring that are applicable to trainees at various levels, ranging from graduate and medical students to junior faculty. We chose a hybrid online-curriculum design that would be time efficient, encourage reflective practice, build both confidence and skills and provide resources and support for mentoring.

In this report we describe the basic structure and elements of the course and analysis of the open-ended written responses to the course assignments of the mentors (2007-2012) by themes under 15 mentoring domains of: 1) accessibility, 2) selectivity, 3) engagement and support, 4) teaching and training, 5) clarity of performance and expectations, 6) sponsorship and sharing power judiciously, 7) providing information and demystifying the system (academia), 8) challenging and encouraging risk taking, 9) constantly affirming, 10) providing exposure and visibility, 11) being an intentional role model, 12) protecting, 13) providing feedback, 14) self-disclosure when appropriate, and lastly 15) counseling, without being a counselor.⁹ These domains cover distinctive components and themes in the process of mentoring and provide a framework for the mentoring curriculum.

The pedagogy for our curriculum is directed to an accomplished adult learner. Adult learning by nature is self-directed¹⁰ in that we learn experientially, formally and informally, often through problem solving in our daily experiences. Therefore, the first consideration was to design a mentor course that is self-directed, focused, relevant, reflective, and draws upon the foundational knowledge of their mentoring experiences. The second consideration was to provide the mentors with formal course readings, resources and assignments that intersect with newly acquired course knowledge with knowledge previously acquired through their mentoring experiences. The third consideration was to acknowledge our mentors' availability to “attend” such a course, knowing well that time is a costly commodity in academic medicine and therefore it must fit into their already demanding schedules. Lastly, we understood the value of face-to-face interactions in which the mentors could explore the richness of diverse perspectives and in the process acquire additional knowledge. To that end we developed a hybrid on-line course that fosters reflection, builds

new knowledge and is highly accessible and sustainable in light of available faculty, staff and funds to support such activities.

The Mentor Course

Orientation

At the beginning of each academic year the University of Rochester-CTSA Mentor Development Core Committee members meet with our CTSA TL1 (graduate and medical students) and KL2 mentor/protégé dyads as a cohort to inform them of the CTSA activities they are expected to attend, and introduce UR-CTSA faculty and staff who are available to support them throughout the protégé's funding period. It is during this meeting that we also inform the mentors they are enrolled in a Blackboard™ Course simply titled "Mentor Course."

We begin by briefly discussing the intent and purpose of the course. The course pedagogy is for the mentors to read, reflect and respond to the 15 domains of mentoring practice. Their primary reading for the course is a book by W. Brad Johnson On Being a Mentor: A Guide to Mentoring in Higher Education,⁹ which provides examples and case studies in these key domains, as well as methods of good mentoring. We then describe the on-line course content and additional mentoring resource materials posted on Blackboard™.^{2,9,11-14} These mentoring resource materials are also provided to the mentors on a compact disc. We next introduce the importance of a protégé's individual Academic Career Plan (ACDP).

Course Assignments

The mentor's first assignment is to develop, along with their protégé, an ACDP complete with long and short-term goals, objectives and activities to support meeting these goals, along with means of verification and evidence that the activities have been completed. While no rigid format is required for the ACDP, a variety of plan exemplars are provided. The plan covers three basic domains: 1) Fundamental Research Knowledge or Skills Generic to Clinical Translational Scientists; 2) Specific Research Accomplishments; and 3) Teaching and Communication Skills. The expectation is to have the mentor and protégé meet, discuss and agree on the protégé's plan before a CTSI Mentor Development Core assigned member meets with the protégé in September and reviews and discusses the ACDP. We conduct this review to ensure a career plan is complete with appropriate activities and evidence to meet the protégé's career trajectory.

On-Line Course Assignments

The mentor's second course assignment is a 15 question open-ended on-line questionnaire that complements the main course reading. This assignment must be completed within a 6-week time period. We recommend they not complete the assignment in one session, but rather enter the course when interruptions are at a minimum, so that they can dedicate sufficient time, thought and reflection in their responses, "save" them and return to the assignment when time allows. We also suggest they use examples whenever possible in their responses.

After the six-week period ends the course assignment is closed. The mentor's responses are labeled numerically, “cleaned” of any identifiers (proper names and departments), and collated into one document inclusive of each of the 15 questions. The aggregate responses are then analyzed by two researchers, trained in qualitative research methods. The responses are read and hand-coded under each of the 15 key domains until consensus of themes and theme saturation occurs. These data will facilitate discussion in the *Mentor Symposium*. Discussions will be grounded in both common responses (agreement), but also areas in which there are outliers or differing responses (disagreements). A week prior to the mentors attending the face-to-face *Mentor Symposium*, they are sent a PDF of all their colleagues’ de-identified responses to review and prepare for the seminar discussion of agreements and disagreements.

The seminar affords the mentor an opportunity to meet and understand the differing perspectives and experiences of mentoring faculty within the university and to work effectively with other mentors. At least two CTSI Mentor Development Core members participate and initially lead the discussion with the mentors’ about the cohorts’ responses. In this session we discuss responses that are: 1) in agreement/consensus; 2) challenging; and 3) questions that brought sharp distinctive disagreements. We discuss *why* these tensions may exist, and what would be a good resolution.

Results

Mentor demographics by academic rank and gender

Of the 73 (2007-2012) mentors who completed the course, 20 (27%) were women and 53 (73%) were men. The academic rank, human, social and institutional cultural capital of academia of our primary mentors is high, with 64 (88%) of mentors at the rank of associate professor or above, and 9 (12%) at the rank of assistant professors [7 faculty are repeating mentors]. Our primary mentors are also representative of 22 departments within the School of Medicine and Dentistry.

Qualitative Data: Themes Open–Ended Questionnaire—Table 1. represents common themes of 66 mentor responses to our open ended questionnaire (2007-2012). The 7 mentors returning to the program throughout this time period who sponsored *new* protégés were not required to repeat the course. Theme saturation emerged within the first year (2007-2008) cohort of 21 mentors. To date, many responses to the 15 questions have remained consistent over time with the exception of the first question “How will you be accessible?” Over the past six years the use of communication technologies such as text-messaging, Skype™ and Drop Box™ have become additional way mentors are accessible to their protégés in their daily mentoring practices.

Responses to Question 3 (*emotional support*) and Question 15 (*counseling*) have consistently provided contrasting views. In Question 3, mentors acknowledge the differing needs and contexts of the TL1 and KL2 scholars when asked, “How do you provide emotional support?” Mentors stated this is determined by the protégé professional status, educational experiences and career trajectories.

For example, TL1 medical student mentors stress the need for emotional support by explicitly addressing the academic cultural differences, such as those of physician training and graduate research education in which contexts and instructional practices are dissimilar. However, for KL2 mentors the most common response is stating the importance of “transparency” and “consistency relative to career expectations” to reduce anxiety and provide emotional support.

Question 15 is the most provocative question, “How will you offer counsel without being a counselor?” There are two categories in which we have received responses. The first is a mentor being *comfortable to encourage* a protégé to see a mental health counselor at the university and/or notifying the program director or chair of the protégé’s need for counseling. The second response is *fear of liability* for not having the proper credentials to make such a “diagnosis.” The latter response also defers responsibility to the protégé’s family or peers to encourage the protégé to seek help through counseling. This response often elicits a lively discussion on personal, professional and institutional liability, responsibility and associated ethical issues.

Quantitative data: Annual Mentor/Protégé Satisfaction Survey—The Mentor Course is meant to instruct and enhance the quality of mentor/protégé relationship. To that end, the evaluation instrument of the outcome of the course is through applied knowledge measured through the *Mentor/Protégé Satisfaction Survey* at the end of the funding year. That said, we did not formally collect any quantitative *course satisfaction* data from the mentors (other than the comments about the course that were uniformly positive) after course completion. We are of the opinion that while course satisfaction survey data can be interesting, the responses are generally overly positive and not representative of the value of the course and what the participant learned. We think that the survey data that we collect at the end of the funding year (Mentor/Protégé Satisfaction Survey) measures the impact of the application of mentoring knowledge and usefulness of the course through the assessment of the mentor/protégé experience and is a much more accurate and an authentic representation of the value of the Mentor Course. In addition, the Mentor/Protégé Satisfaction Survey asks both mentors and protégés parallel questions. The survey measures the satisfaction of the *quality, usefulness* and *total time spent* in seven areas of academic medicine: 1) teaching, 2) research, 3) clinical care, 4) presentation skills, 5) networking 6) career development, and 7) work-life balance during the year of CTSI. (See Table 2 for all results).

When we asked: “How would you rate the total time and quality spent with your mentor?” 86% (59) of protégés and 86% (52) of mentors responding *good* or *excellent* to the “*quality of time spent*” in the mentor-protégé dyad. Consistently all protégés and mentors indicated the highest satisfaction in *research*, with 93% (62) of protégés and 96% (57) of mentors finding discussions in research *very to somewhat useful* for their own career advancement. However, some questions were dependent of the protégés career path and stage. As a result, fewer protégé’s responded to questions on *presentation skills, teaching, networking or clinical care*. However, of those who did respond, most rated these discussions as *very to somewhat useful*: 1) *presentation skills*, 89% (47) of proteges and 93% (49) of mentors; 2) *teaching*, 87% (33) of proteges and 85% (36) of mentors; 3) *networking* 90% (47) of proteges and 82% (44) of mentors; and 4) *clinical care* 86% (35) of proteges and 76% (26)

of mentors. Protégés reported more *satisfaction of career planning* as *very to somewhat useful* with 96% (58) proteges than did their 85% (48) of mentors. As would be anticipated, the discussions on *work-life balance* had more value to 96% (41) to the proteges than 66% (31) of the mentors. When asked the *value added of the CTSI experience*, 91% (63) of the proteges favored the experience over that of 72% (45) of the mentor's.

Discussion

Mentors are a critical resource for the CTSA's to achieve the goal of education and training of a new generation of translational scientists. Only recently has the medical literature provided empirical support for an approach to mentor training.^{7,11,15,16} Within this report, we describe a six-year experience with a hybrid online mentor curriculum that has been implemented in a single institution. We found high levels of satisfaction with the curriculum and overall mentoring among both protégés and mentors. Qualitative data showed remarkable consensus of 14 of the 15 domains of mentoring, with the 15th domain “counseling” being the most controversial. By incorporating a hybrid format, we reinforce these areas of general agreement and help individuals grapple with some of the most sensitive issues (counseling) in a face-to-face seminar.

Along with wide acceptability to the mentors, there are three strengths of this format; convenience, engagement, and financial sustainability. First, mentors can complete the online component of the course at their convenience, in substitution of a burdensome and logistically impractical regime of an eight-week workshop course. Second, the online format also makes it possible to limit “in person” time to a single 2-hour seminar in which the mentors are actively engaged in lively discussions about mentoring practices and applications, and not given passive examples and lectures. Lastly, this format is also financially sustainable with less time away from research and clinical duties.

Our evaluation data suggest that this short format is effective in achieving the overall mentoring objectives. Like Pfund et al,⁷ we found that mentors valued the course regardless of experience level. We differ from Pfund in our evaluation instrument, which included the perceptions of *both* the mentors and the protégés in looking at the impact of the support for mentors offered through CTSI. One limitation of our course is that we are unable to address some important mentoring competencies, such as cultural diversity and interdisciplinary team science. However, these competencies are addressed through other resources of the CTSI and our institutional faculty development resources that provide online and face-to-face learning.

Conclusion

Effective mentoring is important for the success of trainees in clinical and translational research. Rather than leaving it to trial and error or inherent skill, we have developed hybrid online format to facilitate acquisition of the necessary competencies. This format is presented as a useful option for institutions where limited face-to-face time is possible. Our current work is focused on making this course available for other research training programs outside of the CTSI and our own institution, with future plans for wider dissemination.

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References

1. Johnson, WB. On being a mentor- a guide for higher education faculty. Lawrence Erlbaum Associates; Mahwah, NJ: 2007. p. 3
2. Lee A, Dennis C, Campbell P. Nature's guide for mentors. *Nature*. 2007; 447:791–797. [PubMed: 17568738]
3. Selwa LM. Lessons in mentoring. *Experimental Neurology*. 2003; 184(Supplement 1):42–47.
4. Straus SE, Johnson MO, Marquez C, Feldman MD. Characteristics of successful and failed mentoring relationships: a qualitative study across two academic health centers. *Academic Medicine*. 2013; 88:82–89. [PubMed: 23165266]
5. Zerhouni EA. Translational and Clinical Science — Time for a New Vision. *New England Journal of Medicine*. 2005; 353:1621–1623. [PubMed: 16221788]
6. Silet KA, Asquith P, Fleming MF. Survey of mentoring programs for KL2 scholars. *Clinical and Translational Science*. 2010; 3:299–304. [PubMed: 21207765]
7. Pfund C, House S, Spencer K, Asquith P, Carney P, Masters KS, McGee R, Shanedling J, Vecchiarelli S, Fleming M. A Research Mentor Training Curriculum for Clinical and Translational Researchers. *Clinical and Translational Science*. 2013; 6:26–33. [PubMed: 23399086]
8. Pfund C, House S, Spencer K, Asquith P, Carney P, Masters KS, McGee R, Shanedling J, Vecchiarelli S, Fleming M. A Research Mentor Training Curriculum for Clinical and Translational Researchers. *Clinical and Translational Science*. 2013; 6:27.
9. Knowles, MS. Self-directed learning. Association Press New York; New York: 1975.
10. Johnson, WB. On being a mentor- a guide for higher education faculty. Lawrence Erlbaum Associates; Mahwah, NJ: 2007.
11. Handelsman, J.; Pfund, C.; Lauffer, SM.; Pribbenow, CM. Entering mentoring. 2005; The Wisconsin program for scientific teaching; supported by the Howard Hughes Medical Institute professors program. 2013. Available at: http://www.hhmi.org/sites/default/files/EducationalMaterials/LabManagement/entering_mentoring.pdf
12. Bonetta, Laura, editor. Making the Right Moves- A Practical Guide to Scientific Management for Postdocs and New Faculty. 2006. 2013. <http://www.hhmi.org/sites/default/files/EducationalMaterials/LabManagement/MakingtheRightMoves/moves2.pdf>
13. Mullen, CA. A graduate student guide- making the most of mentoring. Rowman & Littlefield Education; Lanham: 2006.
14. Keyser DJ, Lakoski JM, Lara-Cinisomo S, et al. Advancing institutional efforts to support research mentorship: a conceptual framework and self-assessment tool. *Academic Medicine*. 2008; 83:217–225. [PubMed: 18316865]
15. Abedin Z, Biskup E, Silet K, Garbutt JM, Kroenke K, Feldman MD, McGee R Jr, Fleming M, Pincus HA. Deriving competencies for mentors of clinical and translational scholars. *Clinical and Translational Science*. 2012; 5:273–280. [PubMed: 22686206]
16. Feldman MD, Huang L, Guglielmo BJ, Jordan R, Kahn J, Creasman JM, Wiener-Kronish JP, Lee KA, Tehrani A, Yaffe K, Brown JS. Training the next generation of research mentors: the

University of California, San Francisco, Clinical & Translational Science Institute Mentor Development Program. *Clinical and Translational Science*. 2009; 2:216–221. [PubMed: 19774102]

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University of Rochester CTSI Mentoring Course Response Themes 2007-2012 N=66

Table 1

Question	Theme(s)	Quotations
1. Be Accessible: How will you be accessible?	Open door policy. Meet with protégé: scheduled informal, when needed. Communication: inperson, (office/ cell phone, email/texting, Skype, Drop Box	"I have an open door policy..." "Multiple avenues, in person during set times per week, via email, voicemail/ phone, and text message." "We meet 1:1 for 1 hour 2 times per month; we meet jointly with the Chair of the Department for 1/2 hour 2 times per month; we see each other at meetings on about a weekly basis."
2. Be Selective: How many protégé can you mentor effectively?	1-5 protégés : Mix of students, post docs, faculty Easier if similar research	"I have been the primary mentor for about 5 PhD students at one time for the past couple of years, in addition to several Master's students. Given other time commitments, I think that is about as much as I can take on."
3. Provide Engagement & Support: How do you provide emotional support?	Listening to concerns/anxiety. Self-disclose "personal examples of similar situations, unfunded grants, publishing rejections, departmental "competition"	"I think consistency, transparency are key. That is, the anxiety results predictably in part from not knowing what is expected and how one is faring relative to those expectations. So meeting regularly is one way. The scholar should know there is a safe and predictable place to go, an anchor..." "I try to encourage protégés when things aren't going as planned by helping them work through different scenarios, visualize possible outcomes, and come up with potential solutions and 'next steps.'"
4. Teach & Train:	Multiple methods: Hands on, Socratic methods, informal learning & apprenticeship.	"I use a mixed methods approach: one-on-one sessions; referrals to relevant workshops, webinars, courses, and conferences; suggestions for reading (books, journals, etc.); feedback on written work and oral presentations. I also strive to provide them with practical experience with various aspects of research (survey development, manuscript development, interview skills, etc.) through their own work, my work and that of other colleagues."
5. Clarity of Performance & Expectations a) <i>How do you communicate high expectations with clarity?</i> b) <i>How would you evaluate the protégé meeting your expectations?</i>	a.) Measurable long & short term goals. Role model persistence. Use the career development plan. b.) Regular scheduled meetings to review progress.	"The expectation is set in attempting something that no one has done before...that is, the expectation that we will come here to do original and important work, or stay home." "I try to get the protégé to think about, "If I could make one change in the world that would make it a better place (through research), what would that be?" - and pursue that goal. There are no higher expectations than achieving those ends that nourish our own souls."
6. Initiate Sponsorship: Share Power Judiciously How will you promote your protégé internally and externally	Share: connections, collaborations & identify opportunities inside and outside the university to colleagues in the field. Presentations: first author: national & local meetings, conferences/grand rounds. Apply for travel awards	"My protégés typically transition to positions at other universities after they have completed their training here. After discussing their interests and ideas, I will suggest potential mentors and/or programs that they may want to investigate further. I also introduce protégés to colleagues at meetings or if they are visiting the university. I invite protégés to co-author review articles and I make a point of promoting their contributions and talents when I give a talk." "If a colleague contacts me for help with a particular project, my immediate thought is to see if my protégés can help. I mention protégés at scientific meetings, where appropriate, and I write letters of recommendation."
7. *Provide Information: Demystify the System Understanding institutional culture.	Explaining the hierarchical stature Learn by example mentor's interactions within the institution (with commentary). Explicit instructions on how to file an annual report.	"Explaining the leadership structure and who makes decisions about what is helpful. For students and junior faculty, transparent information about promotion requirements and processes are useful. For advancement, emphasize hard work and the importance of gaining visibility through collaboration and scientific publications."
8. Challenge (Encourage Risk) <i>How will you challenge and encourage your protégé to transition to an academic career?</i>	Manuscript writing, co-authoring, Academic career plan/ establish benchmarks.	"My intent is to inspire him by example and by underlining that the steps that will be taken are great opportunities that should be taken advantage of. Given the challenges in getting papers published, etc.. I plan to underline the need to take these issues into broad context and think long term about goals."
9. *Constantly Affirm (Nurture the "Dream") <i>The impostor syndrome is surprisingly common amongst junior faculty/ protégés, what do you do to discourage self-doubts?</i>	Acknowledge success. Imposter" syndrome is universal. You are not alone! Self-doubt can be normal & healthy. Discuss openly. Boost confidence by reaffirming their knowledge.	"...Somehow exposing the impostor syndrome detoxifies it. As with any irrational judgment, a calm response, such as, "What evidence do you have to support your assertion that you are not doing high quality work?" is a useful starting point." "Explain that most even very senior people had mentors, and that self-doubt is in some ways healthy....Self-doubt should be embraced and used to improve yourself, not impair progress."

Question	Theme(s)	Quotations
<p>10. Provide Exposure & Promote Visibility <i>How will you foster opportunities for your protégé to demonstrate their skill and competence?</i></p>	<p>Submit papers and abstracts for publication. Present at local, national, international meetings. Encourage first authorship. Co-investigators on grants. Emphasize protégé's successes. Provide introductions at meetings</p> <p>Common attributes: Integrity, strong work ethic, humility, love of learning, professionalism, clear communication, & intellectual curiosity.</p> <p>Protect against protégé performing tasks of little academic value. Discuss strategies to avoid problems. Encourage resolve to conflicts. Conversations to those who have caused problems.</p>	<p>"Submit papers and abstracts for publication. Present at local, national meetings, seminars and workshops. Encourage to be first author, co-investigators on grants (can go to national meetings). Emphasize to your colleagues your protégés accomplishments and work. Introductions at meetings." "...Simply going to dinner with a bunch of folks can be a great way for them to meet people in a very informal way. Another approach is for the mentor to call and nominate or lobby for the protégé to be included on a task force or committee." "The key to academic success is hard work and perseverance, but that we can have fun in the process. I want to instill in him a sense that he can be the world's expert in his research area if he is reasonably affable and willing to help others out along the way. I would also like to model how to attain a balance between an academic career, family and maintaining one's physical and spiritual health." "Protection of the protégé from these unfair behaviors will come primarily from keeping them focused on the task of the project and having I, as the mentor, handle these other issues. This is a double-edged sword, though, as too much protection can leave them less prepared to handle these issues when they are done." "In research you can always collaborate rather than compete." (i.e., with other assistant faculty members)."</p>
<p>11. *Be an Intentional Model and Provide Professional Socialization. <i>What personal attributes do you hope to model for your protégé?</i></p>	<p>Feedback: with regularly scheduled; informal meetings; negative feedback always in person and privately-direct & personal</p>	<p>"This is an ongoing process—for the most part the feedback is positive and comes with our weekly meetings or by email and rewards the steps rather than the final goal...I have had to deal with nonprofessional behavior. When I did, we had meetings where we reviewed departmental and institutional expectations and rules, and addressed the short-term gains and long-term costs of the behavior."</p>
<p>13. Feedback How will you deliver both positive and negative feedback regarding the protégé's research and professional behaviors?</p>	<p>Self-disclosure: conflicts in research and professional career. Keep mentor/ friend distinct.</p>	<p>"I am fairly open and I show my medals and my scars." "I think it is fine to self-disclose some of the struggles throughout one's career - difficulty getting funding, choosing the wrong environment/institution/career path, and being overworked."</p>
<p>14. Self Disclosure Through judicious self-disclosure a mentor can offer examples to reduce the chance of making a similar mistake.</p>	<p>Counsel: Listen, suggest professional help, notify program director or qualified professional at the university Symptoms: Irritability, not meeting deadlines, missing work, & flat affect.</p>	<p>"If I suspect that there is a psychological issue I would first try to get some more information from the protégé and some feedback. However, if issues are more serious (e.g., not showing up for work or being continuously distractible) I would notify a program director or someone else more qualified than myself in handling these issues."</p>
<p>15. Counsel How will you offer counsel without being a counselor? <i>*What symptoms of a psychological impairment would prompt you to make a mental health referral for their protégé?</i></p>		

Table 2

University of Rochester CTSI MENTOR Protégé-Mentor Satisfaction Survey 2007-2012

1. How would you rate the total time and quality spent with your mentor?		
	Protégé *	Mentor *
Excellent	57% (39)	61% (37)
Good	29% (20)	25% (15)
Fair	9% (6)	13% (8)
Poor	6% (4)	2% (1)
2. Have you discussed teaching?		
	Protégé	Mentor
Yes	54% (37)	63% (40)
No	46% (32)	37% (23)
3. Was the time spent discussing teaching adequate?		
	Protégé	Mentor
Yes	80% (36)	80% (37)
No	20% (9)	20% (9)
4. How useful do you think the teaching discussions were for your career development?		
	Protégé	Mentor *
Very Useful	45% (17)	40% (17)
Somewhat useful	42% (16)	45% (19)
Slightly useful	13% (5)	14% (6)
Not useful	(0)	(0)
5. Have you discussed research?		
	Protégé	Mentor
Yes	99% (68)	97% (61)
No	1% (1)	3% (2)
6. Was the time spent discussing research adequate?		
	Protégé	Mentor
Yes	91% (62)	61% (37)
No	9% (6)	39% (24)
7. How useful do you think the research discussions were for your career development?		
	Protégé	Mentor *
Very Useful	84% (56)	88% (52)
Somewhat Useful	9% (6)	8% (5)
Slightly Useful	7% (5)	3% (2)
Not useful	(0)	(0)
8. Have you discussed clinical care?		
	Protégé	Mentor
Yes	58% (40)	51% (32)

No	42% (29)	49% (31)
9. Was the time spent discussing clinical care adequate?		
	Protégé	Mentor
Yes	75% (36)	62% (26)
No	25% (12)	38% (16)
10. How useful do you think the clinical care discussions were for your career development?		
	Protégé *	Mentor
Very Useful	49% (20)	35% (12)
Somewhat Useful	37% (15)	41% (14)
Slightly Useful	10% (4)	15% (5)
Not Useful	5% (2)	9% (3)
11. Have you discussed presentation skills?		
	Protégé	Mentor
Yes	74% (51)	84% (53)
No	26% (18)	16% (10)
12. Was the time spent discussing presentation skills adequate?		
	Protégé	Mentor
Yes	85% (47)	86% (48)
No	15% (8)	14% (8)
13. How useful do you think the presentation skills discussions were for your career development?		
	Protégé	Mentor *
Very Useful	64% (34)	68% (36)
Somewhat Useful	25% (13)	25% (13)
Slightly Useful	9% (5)	6% (3)
Not Useful	2% (1)	2% (1)
14. Have you discussed networking?		
	Protégé	Mentor
Yes	75% (52)	87% (55)
No	25% (17)	13% (8)
15. Was the time spent discussing networking adequate?		
	Protégé	Mentor
Yes	81% (46)	79% (44)
No	19% (11)	21% (12)
16. How useful do you think the networking discussions were for your career development?		
	Protégé	Mentor *
Very Useful	67% (35)	43% (23)
Somewhat Useful	23% (12)	39% (21)
Slightly Useful	8% (4)	17% (9)
Not Useful	2% (1)	2% (1)

17. Have you discussed career planning and development?		
	Protégé	Mentor
Yes	87% (60)	92% (58)
No	13% (9)	8% (5)
18. Was the time spent discussing career planning / career development adequate?		
	Protégé	Mentor
Yes	84% (53)	89% (51)
No	16% (10)	11% (6)
19. How useful do you think the career planning discussions were for your career development?		
	Protégé*	Mentor*
Very Useful	66% (40)	60% (34)
Somewhat Useful	30% (18)	25% (14)
Slightly Useful	3% (2)	16% (9)
Not Useful	2% (1)	(0)
20. Have you discussed the work-life balance?		
	Protégé	Mentor
Yes	62% (43)	73% (46)
No	38 % (26)	27% (17)
21. Was the time spent discussing the work-life balance adequate?		
	Protégé*	Mentor
Yes	88% (42)	71% (36)
No	13% (6)	29% (15)
22. How useful do you think the work-life balance discussions were for your career development?		
	Protégé	Mentor
Very Useful	70% (30)	36% (17)
Somewhat Useful	26% (11)	30% (14)
Slightly Useful	5% (2)	28% (13)
Not Useful	(0)	6% (3)
23. Please rate the value added to your career development through participation in CTSI education and training programs.		
	Protégé	Mentor
Immensely	49% (34)	37% (23)
Considerably	42% (29)	35% (22)
Slightly	9% (6)	26% (16)
No Value	(0)	2% (1)

* Due to rounding some percentages are 99% or 101%