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# COVID-19: A call for mentorship in radiology

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## ABSTRACT

During the COVID-19 pandemic, mentorship relationships have undergone significant strain. Sudden changes in the practice environment have caused radiologists to focus their attention to more immediate and essential clinical needs, thus leaving important extracurricular non-clinical endeavors like mentorship by the wayside. However, mentorship is essential more than ever during the pandemic to build strength and resilience in radiology. Specifically, mentorship can foster job resilience, facilitate career development, promote diversity, support wellness, and stimulate future practice growth during this pandemic. Practical actions are described that mentors can follow to help develop and sustain mentorship relationships during the pandemic.

**Summary:** Mentorship is critical now during the COVID-19 pandemic to build strength and resilience in radiology.

## 1. Introduction

At its core, mentorship can be conceptualized as a “long-term relationship with a responsibility to provide the support, knowledge, and impetus that can facilitate professional success”.<sup>1</sup> Mentorship has been proven to be extremely valuable in both business and medicine to facilitate promotion and career development, boost job satisfaction, increase job retention and help in recruiting exceptional and diverse talent.<sup>2–4</sup> Specifically, these inherent benefits of mentorship have also been shown to promote career development, research initiatives, and recruitment/retention of junior radiologists in the field of radiology.<sup>4,5</sup>

With the onset of COVID-19, mentorship relationships have undergone significant strain as physicians and medical practices have quickly implemented safer operational policies such as stringent physical distancing measures while coping with abrupt financial loss.<sup>6–8</sup> Such sudden changes in the practice environment have caused radiologists to focus their attention to more immediate and essential clinical needs, thus leaving important extracurricular endeavors like research, conference attendance, and mentorship by the wayside.<sup>9,10</sup> Several high-profile business sectors have recently published statements emphasizing the importance of mentorship during times of global health crisis and argue that mentorship is more critical than ever for ensuring the resilience, adaptability, diversity, strength, well-being, and future growth of a corporation.<sup>11–13</sup> Radiologists have also expressed specific concerns regarding the pandemic effects on mentorship in radiology as practices move towards telecommunicating workplace models to

practice radiology at safer distances.<sup>9</sup> Long-term negative impact on mentorship may potentially occur if radiology leaders do not recognize the imminent threats that the pandemic is currently placing on mentorship relationships. By specifically including mentorship in both recovery and future growth planning strategies during the pandemic, radiology leaders can mitigate the current negative effect of the pandemic on mentorship and better plan for future times of improved health.

In this manuscript we discuss the unique challenges both individual radiologists and radiology practices face during the COVID-19 pandemic and define the positive impacts mentorship can offer during the pandemic to help foster job resilience, facilitate career development, promote diversity, support wellness, and stimulate future practice growth. We also describe practical steps mentors can follow to help sustain mentorship relationships during the current pandemic.

## 2. Challenge # 1: job security and future practice growth

The current negative economic impacts from COVID-19 on both business and healthcare pose a serious threat to radiologists’ overall job security. The abrupt and significant reduction in imaging volume coupled with concurrent revenue losses experienced during the pandemic have caused medical institutions and radiology practices across the nation to make difficult staffing, clinical, and financial adaptations.<sup>6,8–10,14,15</sup> Outpatient radiology centers offering screening exams appear to be the most vulnerable.<sup>6,9</sup> Recovery is occurring but is

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slow and delayed with no definite timeframe as to when radiology groups will fully recover.<sup>6</sup>

A growing concern in recent literature also suggests that potential long-term effects from the pandemic may threaten future radiology specialty growth because of delays in training and recruitment.<sup>10,16,17</sup> Activities such as in-person interviews, match day, graduation, and onboarding have been different than previous years. These altered training and recruitment experiences may leave new hires feeling overwhelmed and isolated.

Mentorship increases job satisfaction which consequently improves job retention.<sup>2,4</sup> In turn, less turnover of radiologists is cost effective for a radiology practice.<sup>18,19</sup> Thus, radiology practices should seriously consider implementing mentorship into recruitment and succession planning strategies to help mitigate current effects the pandemic is having on training, retention, and recruitment. For instance, radiology practices could consider ensuring that all new hires will be matched with a formal mentor or informal mentorship network group.<sup>20</sup> Early established mentorship relationships may attract new hires and diminish natural feelings of anxiety that come with starting a new job. This reassurance is particularly needed since the anxiety of healthcare professionals has been exacerbated during the pandemic.<sup>21</sup> The promise of mentorship may help radiologists be less hesitant about carrying out their clinical responsibilities and feel “safer” and more “supported” by their practices.

### 3. Challenge # 2: career development

The pandemic is stunting personal career development. In academic radiology, ongoing and future prospective clinical research is hindered because of safety restrictions and loss of research funding and/or economic hardship.<sup>10</sup> For instance, due to budget constraints, the Cancer Prevention and Research Institute of Texas (CPRIT) has delayed the funding of grants for 2020 and early 2021.<sup>10</sup> With the rise in domestic responsibilities, delays in research opportunities and funding, and as other important curricular vitae building activities continue to remain less available during the pandemic, a radiologist’s career trajectory for future promotion consideration or leadership positions may be slowed.<sup>10,22</sup> The challenge of less academic or clinical productivity occurring for promotion consideration is compounded by decreased frequency of promotion review committee meetings, institutional budget constraints, and hiring freezes.<sup>10,22</sup>

Mentorship has proven benefits of helping to facilitate career development and promotion in medicine.<sup>2,3,5</sup> During the pandemic, mentorship can continue to foster professional career-building opportunities, promote ongoing collaboration, and facilitate effective communication. One possible silver lining to the decreased imaging volumes and clinical coverage requirements may be newfound protected time for radiologists. Since the lack of time is the number one barrier to effective mentorship, mentors and mentees should take advantage of any increased nonclinical time during the pandemic to work on research, revisit career goals, adjust project timelines, attend virtual continuing medical education conferences, and explore other creative ways to continue to build one’s curriculum vitae for annual performance review.<sup>5,9,10</sup> Additionally, radiology leaders can encourage colleagues to mentor one another on how to utilize new virtual platform technology in order to network and collaborate at safe distances. Mentors should encourage mentees to engage in local and national career development activities like giving trainee educational lectures, participating in national society subcommittees, applying for grants, becoming a journal reviewer, and/or presenting research at a national conference. All these career-building activities can be facilitated with mentorship while implemented virtually at a safe distance.

Radiologists should actively seek out mentorship to help preserve important career advancement and promotion/partnership opportunities during the pandemic in order to remain personally marketable, visible, and flexible as various threats to job security and career

development persist. By displaying job commitment and being actively engaged in the workplace during the most challenging times in one’s career, a radiologist may not only gain respect from leadership, but such efforts may also lead to greater career advancement opportunities down the road, especially as healthcare begins to recuperate losses incurred during the COVID-19 pandemic.<sup>12</sup>

### 4. Challenge # 3: diversity

Recent research in the business sector has revealed that job stability issues are disproportionately affecting women.<sup>11,23</sup> Similarly, women physicians appear to be at a disadvantage because of COVID-19.<sup>9,22,24</sup> The pandemic has presented challenges like childcare coverage, home schooling, and other domestic responsibilities that are tipping the delicate scale of work-life integration. While almost all radiologists are scrambling to balance personal and professional responsibilities in this new paradigm, early research has revealed that women physician-scientists appear to be taking a disproportionate amount of added domestic responsibilities compared to male counterparts.<sup>9,22</sup> Immediately before the pandemic, there was narrowing of the gender equity gap in academic medicine.<sup>22</sup> Following the pandemic, authors now fear that any progress towards achieving gender equity in the workplace may either not resume or be completely erased.<sup>22</sup> For instance, women who are currently overwhelmed with domestic responsibilities during the pandemic may continue to be perceived as too busy to attend important meetings or disinterested in applying for leadership opportunities. Such gender bias or generalized assumptions would be detrimental to the future success of women and could negate all of the positive advances in diversity that radiology practices have worked so hard to achieve prior to the onset of the pandemic.<sup>22</sup>

Radiologists of underrepresented minority households may also be facing similar challenges.<sup>11,22</sup> Early data in the pandemic showed that unemployment rates rose faster not only for women, but also for people of color.<sup>23</sup> Kalev suggests this discrepancy may be due to the fact that lower socioeconomic households often hold job positions in certain industries that carry a higher risk of layoff. Industries may also unintentionally have biased layoff decision-making criteria written into their corporate policies.<sup>23</sup> Radiologists of minority households may therefore also be faced heightened challenges during the pandemic that are both socioeconomic and psychosocial in nature.

While readers should be mindful of the root causes that have worsened gender and socioeconomic bias during the pandemic, the short-term disparity of opportunities for women and minority groups does not have to be permanent. High profile leaders in business and in medicine encourage leaders to remember that mentorship innately promotes a culture of “diversity, inclusion, and belonging”.<sup>11,13,22</sup> Previous research has also shown that both mentorship and sponsorship are valuable for increasing recruitment, promotion, and retention of women and individuals of other minority groups.<sup>2,5,25</sup> The US Coast Guard Academy understood the value of mentorship on diversity, stating that during the pandemic their mentorship program “shows the dual benefit of helping keep the organization resilient and adaptable while also supporting strategic recruitment and retention goals around gender and underrepresented groups”.<sup>13</sup>

Radiology leaders should therefore seriously consider prioritizing mentorship and sponsorship programs during the pandemic to promote a workplace culture of inclusion and diversity in order to help mitigate any widening gender and ethnicity gaps that may occur during the pandemic. Creative local solutions to promote mentorship during the pandemic should be encouraged. Previous studies have shown that women and other underrepresented minority groups feel more comfortable working with mentors of the same diversity background.<sup>26</sup> Mentors and senior leaders of similar gender or ethnicity should serve as helpful sounding boards and role models to help junior female and minority radiologists navigate through work/life balance issues. Peers should mentor one another by sharing vital information and resources to

help colleagues with any childcare needs or other domestic responsibilities. Additionally, radiology leadership should ensure there are equal opportunities of mentorship and sponsorship of women and minority groups both now and in the future, so that every radiologist receives equal consideration for leadership opportunities, research initiatives, etc. Leadership should also consider offering virtual departmental meetings at more convenient hours when there are typically less domestic responsibilities, reducing the frequency of meetings, and prioritizing agenda items to keep meetings brief and relevant to help all radiologists in the group have equal opportunity to attend and contribute.<sup>22</sup>

By making a concerted effort to continue mentorship and sponsorship activities throughout the pandemic, radiology leaders will ensure that a more resilient and diverse group of talented radiologists are available well into the future. As Brown and Murray state, “mentorship is how we build longevity within our organization and ensure that we are actively building a diverse pipeline”.<sup>11</sup>

#### 5. Challenge # 4: wellness

Published literature suggests that COVID-19 pandemic is associated with burnout, anxiety, or in more extreme cases, post-traumatic stress disorder.<sup>9,21,27,28</sup> Increased physical distancing coupled with depopulating of reading rooms, limited interaction with referring physicians, and decreased direct patient care can contribute to increased feelings of isolation in radiologists.<sup>6,13</sup> Leaders are encouraged to make themselves more visible to radiologists during the pandemic and radiologists are asked to pay close attention to the radiologist-clinician relationship during these times so as not to lose the strong, established relationships that exist.<sup>6,21</sup>

Physical distancing during the COVID-19 pandemic has certainly changed the way radiology practices are operating, but “physical distancing” does not have to equate to “isolation”. Not only does mentorship have the added value of improving a radiologist’s overall morale but mentorship serves to unify radiologists with one another and with other individuals.<sup>2,5</sup> Mentorship can help to break down “organizational silos”, allowing individuals to come together as one to be more efficient, more effective, and more resilient.<sup>13</sup> For instance, through the use of today’s video conferencing technology, junior radiologists can more easily “sit at the virtual table” with leadership not only within radiology but across a corporation or institution to collaborate, exchange information, and innovate.<sup>11</sup> Radiologists no longer need to scramble schedules in order to ensure physical presence at important in-person meetings with high level leadership. Video conferencing can also continue to strengthen radiologists’ relationships with referring providers through continuation of virtual multidisciplinary conferences. In all, telementoring has allowed individuals to overcome the traditional barriers of distance and lack of protected time to engage in mentorship activities remotely. Virtual meetings have also helped break down any “silos” previously constructed from more traditional in-person meeting models by allowing collaboration and mentoring opportunities among radiologists of all ranks across both national and international platforms.<sup>5,11,13</sup> Virtual mentoring platforms can also support radiologist wellness by combatting any feelings of loneliness and isolation caused by the pandemic.<sup>11,13</sup> Ultimately, the unique relationships between mentors and mentees can be a source of positive energy for both parties.<sup>29</sup> Both radiologist and radiology leaders should recognize the positive synergistic effects mentorship has on individuals and aim to create a culture of wellness and inclusion through mentoring, since mentorship might be the very thing that helps organizations sustain employees through the pandemic.<sup>13</sup> Telementoring strategies are being shown to be equally as effective as traditional in-person meetings for implementing mentorship.<sup>11,30</sup> Both safe distancing practices during the pandemic and physical distances between mentors and mentees are not evidence-based reasons to delay essential mentorship activities.

Mentorship also helps to create vital emotional stewardship.<sup>13</sup>

Emotional stewardship prioritize long-term, inclusive decisions that help the well-being of the entire organization<sup>31</sup>; mentorship focuses more on individual relationships and fosters long-term goals for steady professional development.<sup>13</sup> Previous research in the business sector has shown that relationship-centered type business models develop trust and promote pro-organizational behavior when stewardship and mentorship are collectively implemented.<sup>13</sup> Increasing consumers’ individual psychological ownership has been shown to facilitate stewardship of public goods in a variety of contexts, including a public lake with kayakers, a state park with skiers and a public walking path. Increasing psychological ownership enhanced effortful stewardship such as picking up trash in a lake and financial stewardship such as donating money.<sup>32</sup> Organizations which invest in mentoring and partnering with physicians transform the physician role from “carpenter” to “architect”, and engage physicians like radiologists in improving care for their patients and the sustenance of the organization.<sup>33</sup>

The long-term effects that the COVID-19 pandemic has on a radiologist’s well-being are currently unknown, so radiology practices must do all they can do now to help support the emotional and mental health of their radiologists. Radiology leaders that continue to make mentorship a priority in the workplace may find that radiologists are more trusting of decisions, more resilient to change, more willing to communicating concerns, and feel more at peace knowing that their leadership is fully invested in their well-being.<sup>13</sup>

#### 6. Actions for mentors

Below are some specific measures mentors can take to foster and preserve important mentorship relationships during the pandemic.

1. Reach out: Keep your commitment to your mentees. “Great mentors show up and engage with mentees in crises and uncertain times, even when that requires creativity and adaptation”.<sup>12</sup>
2. Keep an Open Door: Provide nonthreatening opportunities for mentees to give feedback regarding opportunities for improvement and promote transparency. Mentorship relationships should always be built on foundations of honesty and trust, and this transparency should not stop because of a global health emergency.<sup>23</sup> Keep the door open for future conversations and/or support. Stay approachable and use inviting phrases such as “You can reach out to me any time you need to talk”.<sup>34</sup>
3. Lean into Candor and Listen: Become a more effective mentor by asking mentees their stressors and check in with mentees especially during heightened times of stress and uncertainty.<sup>23,34</sup> Psychosocial support may be more important than the ordinary career development support during the pandemic.<sup>12</sup>
4. Be Vulnerable, Authentic, and Empathetic: Mentors should directly address mentees’ concerns – Mentors may wish to share similar personal experiences and challenges with the mentors and discuss ways they overcame such challenges.<sup>34</sup> For example, mentors describing their own challenges with work–life integration and isolation during the pandemic may resonate with those of the mentee, creating a common ground for conversation.
5. Continue Sponsorship: Use new “discretionary time to leverage your social capital and sponsor mentees, opening virtual doors and making valuable introductions”.<sup>12</sup> Actions can be simple but impactful. For example, consider including qualified mentees on important emails or invitations to high-level virtual meetings to observe and/or contribute.<sup>12,25</sup> Specifically, radiology organizations are now hosting more webinars which may be an excellent platform for mentees to gain experience giving virtual presentations.<sup>35,36</sup>

#### 7. Conclusion

Multiple unique challenges for individual radiologists and radiology leaders have arisen during the current global pandemic, including job

security, practice growth, career development, diversity, and wellness. Mentorship can help increase job satisfaction and retention, allow for continued recruitment of diverse talent, improve workplace morale and facilitate both professional and personal growth.<sup>2–4</sup> Radiology leaders should therefore seriously consider prioritizing mentorship to help address these many challenges and mentors should not stop mentoring. By being creative and making use of virtual platforms and telementoring strategies, mentorship relationships can continue to thrive even while in-person collaboration is not feasible. Radiology leaders and mentors alike should remember that even the smallest gesture or word of encouragement during this time can leave a lasting impact and is essential for creating the resilience and adaptability needed to help radiologists and radiology practices cope during this difficult time.

### Employment status

All authors of this manuscript are not in private practice, and are nonpartner employees of the University of Texas MD Anderson Cancer Center.

### Declaration of competing interest

None relevant to the article. The authors declare that they had full access to all of the data in this study and the author(s) take(s) complete responsibility for the integrity of the data and the accuracy of the data analysis. Both authors are non-partner employees of a State academic institution. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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