Shaping the Future of Fellowship Training: Learning, Leading, and Saving Lives

I believe that education is the backbone of progress of progress in medicine. Education is "the most powerful weapon which you can use to change the world" (Mandela, 2003). In Hematology and Oncology, our responsibility is not only to diagnose and treat disease, but to push forward knowledge, innovation, and compassionate care. At the core of our fellowship training is a mission: to cure cancer and save lives throughout the world. To achieve this, we must commit to preparing the best possible fellows as future leaders who are adaptable, innovative, and lifelong learners. Learning is crucial for personal and societal growth. It empowers individuals with knowledge and skills, faster critical thinking and enhances adaptability to a constantly changing world. Preparing our fellows is crucial in their professional lives. They are trained to analyze situations, make informed decisions and solve problems effectively. Fellowship training teaches much more than knowledge regarding medical issues.

Beliefs about Learning

I believe that learning is most powerful with it is personalized, dynamic, and rooted in authentic practice. Fellows should not only master the science of oncology, but also develop critical thinking, clinical judgment, and the ability to innovate in a rapidly evolving field.

Digital learning provides us with an unprecedented opportunity to embrace multiple learning styles, from interactive case-based modules, flipped classrooms, and online discussions, to simulation, virtual tumor boards, and AI-driven adaptive learning. "Online learning is not the next big thing, it is the now big thing" (Draves, 2000). This variety not only enhances knowledge acquisition, but also ensures we train fellows who are prepared for the complexity and diversity of patient care. Digital classrooms truly transform the way students interact with teachers, learning material and one another. By breaking down the walls of traditional classrooms, we open a world of learning that's boundless and tailored to each student's journey. Learning should be an adventure, not a task.

I don't have the typical education field because I work in a hospital, but I do have many of the same issues that affect today's teachers and other educators have. We all have students to support and encourage, but it can be done in more ways than one. With our students, flexibility is so important, due to their workload and schedules. "Digital learning makes education more accessible, regardless of their location or circumstances" (Teachfloor, n.d.). It also has the potential to help over come traditional barriers. With continued development and collaboration, digital learning has a bright future ahead.

What needs to change in Education

Traditional medical education has often emphasized rote memorization, passive lectures, and one-size-fits-all teaching. While these methods have value, they do not fully prepare fellows for the unpredictable and deeply human challenges of oncology.

- We must move beyond passive learning into environments that emphasize choice, ownership, voice, and authenticity.
- We must embrace digital innovation without losing the essential human connection in mentorship and patient care.

As far as change in the education field, I personally think moving more toward individualized education is the way to go. Our current education system treats all students the same. "This is ineffective and detrimental to students, educators and society as a whole" (Stand Together, n.d.). "If we teach today's students as we taught yesterday's, we rob them of tomorrow" (Dewey, 1915). Creativity and excitement isn't there anymore and it should be. Achieving an individualized model of education is admittedly more difficult and more expensive than creating a simple one size fits all model, the benefits are more than worthwhile. Students should be able to access any profession that they can dream of. It will take a collective effort of educators, policymakers, parents and students to create an education system that empowers every learner to thrive. The first and foremost problem I see is usually the cost.

Emerging Issues

In graduate medical education, we face pressing questions such as:

- How do we ensure equity and access to cutting edge digital tools for all fellows?
- How can we harness AI and machine learning responsibly in clinical decision making and education?
- How do we balance the explosion of digital knowledge with the need for reflection, empathy, and patient-centered care?

These issues remind us that digital learning is not the end goal, it is the tool to support our larger mission of training physicians who can cure cancer and save lives. In medicine there is no end goal, digital learning enhances our dreams and aspirations. Khakpaki et al. (2025) highlights that "artificial intelligence can create immersive and individualized educational environments, helping learners build critical thinking skills and adapt to evolving medical practice."

My Vision for our Heme/Onc Fellowship

I envision a fellowship where learning is:

- Flexible and personalized, meeting the fellows where they are and acknowledging that there are different types of learning styles.
- Collaborative and global, using a digital platform to connect with experts and peers worldwide.
- Cutting edge yet human, leveraging innovation while staying grounded in compassion and patient care.

My Declaration

I believe that the future of Hematology/Oncology fellowship lies in a commitment to diverse, digital, and dynamic learning. By embracing these approaches, we not only expand the knowledge and skills of our fellows but also move closer to our ultimate mission: to cure cancer, save lives, and to give hope. I'd like to say that lifelong learning and professional development and ensuring patient centered and ethical care will always be a top goal here at MD Anderson. Recent evidence confirms that "multidisciplinary and digitally enhanced oncology education, such as case-based modules and virtual tumor boards, significantly enhances trainees' clinical understanding and collaborative capabilities" (**Tahmasebi et al., 2025**). Learning in diverse environments helps individuals develop skills for engaging in a complex and interconnected world.

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