



## **Hampton University Proton Cancer Institute and Duke University Partnership Advances Proton Therapy Education and Access**

As part of a collaboration aimed at expanding access to proton therapy and cancer treatment across the East Coast, the Hampton University Proton Cancer Institute (Hampton Proton) recently welcomed senior residents and a program director from Duke University for immersive, hands-on training in a clinical proton therapy setting as part of a longstanding partnership entering its third year.

Duke University—currently developing its own proton therapy center anticipated to open in 2029, which would join the 47 proton therapy centers operating nationwide—sent Radiation Therapy Physics Residents Seifallah Emam and Lana Wang to train alongside Hampton Proton’s clinical and physics teams during the week of March 16. The following week, Duke program director Dr. Yongbok Kim visited Hampton Proton to engage with leadership and clinical staff, further strengthening collaboration between the two institutions.

At Hampton Proton, Duke representatives were able to see how an established proton therapy program integrates treatment planning and quality assurance into cancer care—offering practical insight as they move toward launching their own center.

Kim, a professor of radiation oncology and co-director of Duke’s medical physics residency program, emphasized the importance of hands-on training in preparing future physicists.

“It’s really important for them,” said Kim of the value his residents experience learning at Hampton Proton. “They can read a lot from a textbook, but without seeing the behavior of the proton beam, it is hard to imagine [the reality] of a clinical practice.”



*Hampton Proton’s Director of Clinical Operations, Erin Erdos, and Director of Physics, Biniam Tesfamica, with Yongbok Kim, co-director of the medical physics residency program at Duke University.*

During their time at Hampton Proton, Emam and Wang gained firsthand insight into treatment planning and the day-to-day clinical workflows of the center.



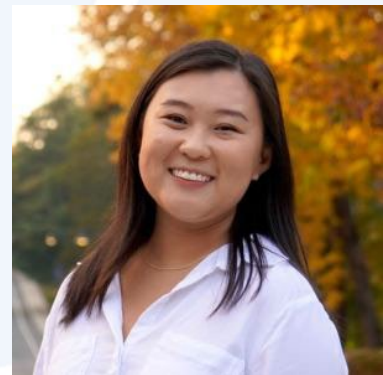
*Seifallah Emam, MS, Image courtesy of Duke University*

Emam discussed the benefit of training on Hampton Proton’s system, explaining that it helped him better connect the underlying principles of treatment planning and delivery. He noted that while some newer machines can sometimes feel highly complex, exposure to systems that make those processes more visible can make it easier to understand the foundational mechanics behind proton therapy. He added that Hampton Proton’s use of multiple delivery techniques—including pencil beam scanning, double scattering, and uniform scanning—provided a valuable opportunity to observe and compare several treatment approaches within one clinical setting.

Their shared experience underscored a similar sentiment of appreciation for the Hampton Proton team.

“The textbook only tells you so much,” said Wang. “So just being here, having the physics team that’s been very supportive of us and our learnings, and taking their valuable time to teach us has been really great.”

She also highlighted the opportunity to observe how dosimetry and physics teams use the IBA system to develop treatment plans, particularly the careful consideration of beam angles and strategies used to maximize tumor targeting while minimizing dose to healthy tissue.



*Lana Wang, MS, Image courtesy of Duke University*

“It’s incredibly rewarding to work with residents who are about to enter the field,” said Biniam Tesfamical, Hampton Proton’s Director of Physics. “Being able to provide hands-on

experience and mentorship are a key part of what we do, and it's how we continue to move proton therapy forward.”

Beyond institutional goals, the collaboration reflects a broader effort to expand access to proton therapy by strengthening the pipeline of trained professionals and supporting the successful development of new centers.

As the eighth proton therapy center established in the nation and the most established center in Virginia, Hampton Proton continues to play a central role in advancing patient care, research, and professional training. As Duke moves toward opening its own proton therapy center, partnerships like this underscore the importance of established institutions in helping expand access to precise, advanced, and compassionate cancer treatment.