Pursuing the Modern Land-Grant Mission

Presented by Eric Kaufman, Faculty Representative to Virginia Tech's Board of Visitors

Twelve years ago, my son was beginning a preschool program here in Blacksburg, and I was grateful to have support. Like so many Virginia Tech faculty, the closest member of my extended family lives hours away, which makes dependent care a critical factor in allowing me to fulfill my role as a faculty member. That same year, Virginia Tech expanded an agreement with Rainbow Riders Childcare Center, allowing faculty, staff, and graduate students more access to local day care services. For Dr. Linsey Marr, though, placing her son in the day care offered more than time to work; the experience altered the trajectory of her research. Dr. Marr used her expertise as a civil and environmental engineer to study airborne transmission of viruses, first with the seasonal flu and more recently with the novel coronavirus. As one of our University Distinguished Professors, Dr. X.J. Meng, shared with the New York Times: "There are not many people who are trained engineers who also study infectious disease.... She's really the star in the field right now."

You have likely seen Dr. Linsey Marr quoted and interviewed in a variety of media outlets. My own spouse highlighted the connection for me during the news one evening, when she saw Linsey on TV and said, "I think that's one of our neighbors." While we are proud to know such a renowned scientist, it is important to understand the environment and support that allowed Dr. Marr to emerge as a trusted scientist when the entire world is looking for guidance. Her story includes <u>Virginia Tech policies</u> that allow for modified duties, but her story may be better characterized by Virginia Tech's motto of *Ut Prosim* (that I may serve).

Earlier this month, I met with Dr. Marr on the deck outside her home. Her spouse, Erich Hester, is also a faculty member at Virginia Tech and successful in his own right; but that evening, he stayed inside with their children. I asked Linsey what has allowed her to be successful at Virginia Tech, and she highlighted several mentors and programs, including Virginia Tech's internal funding for interdisciplinary projects—things like ICTAS (the Institute for Critical Technology and Applied Science), as well as IGEPs (Interdisciplinary Graduate Education Programs). She particularly emphasized the collaborative and collegial environment, within her own department, but also when working across departments. I asked Linsey what attracted her to Virginia Tech, and she noted how important it was that she was not going to be the only female faculty member in her department. If we want more faculty like Linsey Marr, we need to take care of the faculty we have and support them in ways that allow them to address the world's most pressing challenges.

Personally, my admiration for Linsey Marr relates to her reflection of Virginia Tech's land-grant mission. As a land-grant institution, Virginia Tech was founded with a tripartite mission, including learning, discovery, and engagement. On the learning front, Dr. Marr teaches courses on air pollution and environmental engineering. In 2019, she earned the Excellence in Teaching Award from Virginia Tech's Center for Excellence in Teaching and Learning (CETL). Related to discovery, Dr. Marr leads the Applied Interdisciplinary Research in Air (AIR2) laboratory. She is

especially interested in emerging or non-traditional aerosols such as engineered nanomaterials and viral aerosols. She collaborates broadly with others to understand how changes at the microscopic to global scale affect public and environmental health. On the engagement front, Linsey remains committed to <u>public communication</u> and combating misinformation. Part of the reason Marr has become so popular in public forums is her ability to explain difficult scientific concepts in easy-to-understand terms. The engagement mission is about more than just communicating research, though, it is about addressing meaningful problems. And that takes me back to Linsey's experience with the community day care. She noticed her son kept getting sick with minor illnesses that seemed to be spread through the air, and that practical problem guided her research. Considering Linsey's persistent commitment to learning, discovery, and engagement, I believe she represents the epitome of Virginia Tech's land-grant mission.

Within the Commonwealth of Virginia, there are many higher education institutions, yet Virginia Tech has a unique heritage as the "people's university," because of its founding as a land-grant institution. As we head into Virginia Tech's <u>sesquicentennial celebration</u>, let's reclaim the tripartite land-grant mission of learning, discovery, and engagement. Yes, faculty share this responsibility, but it is critical that the faculty who are investing in interdisciplinary work and engaged scholarship are recognized and rewarded for their efforts. The needed support cannot be achieved at a department or program level; it must be a commitment at the university level. It is critical that the Board of Visitors embrace engaged scholarship as a core mission of the University and ask Virginia Tech administrators questions about how such work can be better supported.

I will close with a statement by a senior administrator, quoted in a recent book on <u>Land-Grant Universities for the Future: Higher Education for the Public Good</u>:

Faculty will be most active where they see themselves as being rewarded. Out of all the things we have figured out in higher education and land-grant universities regarding faculty rewards, we probably have failed most miserably on engagement. I think we have figured out how to reward great teaching, and certainly we have figured out how to reward great research and scholarship. But when it comes to engagement, I don't think we do a very good job. And we can give a lot of lip service to it as a land-grant university, and we often do just that. But when it comes right down to it, to evaluating faculty and giving them rewards, I think engagement is undervalued. In fact, it is often just ignored. (p. 123)

I am asking for your help to ensure that engagement is not ignored at Virginia Tech. Thank you.