

## Keynote Speech, December 2024 Commencement

### Dr. Eric Freundt

President Dahlberg, Provost Stern, members of the Board of Trustees, administration, staff and my fellow faculty members, the class of 2024 and all your supporters - Thank you all for this incredible honor of standing here today, sharing in this moment of celebration with you.

This is a moment to stop and reflect – on how far you've come, the challenges you've faced, and the successes you've achieved. To be here today ready to receive your degree, you've overcome a pandemic, housing shortages, endless construction projects, hurricanes, and numerous other disruptions. You have learned many things on this journey, but I am confident that each one of you has learned resilience, the ability to bounce back from difficulties and challenges – and the resilience you've learned will be important throughout your lives. Today is also a moment to reflect on the fact that you didn't make this journey alone. Your families, friends, faculty, and loved ones have been integral in your success, and we celebrate with you today.

While we celebrate your achievements, I'd like to offer you a different perspective on success, one that involves some unexpected teachers—viruses. Now, I know that none of you took my virology class, but today I want to share with everyone, including your family and friends, what these incredibly small organisms might teach us about living a successful life.

Yes, I'm talking about viruses, those same tiny forces that disrupted your education in 2020 and led to endless Zoom calls and the great toilet paper shortage. We don't often think highly of viruses. But they, in their own way, are the most successful organisms on the planet. Let me share a few fun facts that illustrate their incredible success.

First, viruses outnumber all other organisms on this planet. In fact, if you took a single mouthful of seawater, it would contain a virus population roughly equal to the number of people in the United States. Viruses that infect bacteria alone are so numerous in the world's water supply that if you lined them up, they'd stretch 200 million light years into space. And, interestingly, about 8% of your genome is made up of viral DNA, remnants of infections that became part of our genetic material throughout human evolution. So, as I've reflected on the secret to their success, I've noticed some ideas that strongly resonate with me on what it will take for you to achieve your goals, and so today I offer you some wisdom from the most successful organisms on the planet.

Here's the first one: viruses reveal the **importance of failure**. Viruses mutate constantly. Most of their attempts to infect new hosts fail. But they persist.

Take the example of HIV. When HIV enters a host's body, it faces an army of immune defenses. Most of the viral particles don't make it. They're wiped out by our body's immune response, and yet, HIV persists. Why? Because every time the virus replicates, it mutates. Most of these

mutations lead to failure—broken viruses that can't infect a cell or replicate. But every once in a while, a mutation occurs that allows the virus to evade immune defenses. HIV persists by embracing failure as part of its strategy.

One of my favorite hobbies that I enjoy with my family, who are just there (wave to everyone) is to go snow skiing. And in my family, when we go skiing, we have a saying: "If you're not falling, you're not skiing." The same is true in life. When you are learning something new, or something difficult, you're probably not pushing yourself hard enough if you aren't occasionally failing. Failure is not the opposite of success; it's an essential part of it. So don't shy away from failure. Embrace it as a sign that you're stretching beyond your comfort zone and growing.

The second lesson viruses offer is the **importance of embracing change**. The myriad strains of COVID-19 serve as a constant reminder of how adaptable viruses are. With each new strain, Alpha, Delta, Omicron, etc., the virus evolved, sometimes becoming more transmissible or more capable of evading our vaccines and immune responses.

Similarly, success in life requires the ability to change. Think back to who you were as a freshman. I bet you've changed in ways you could never have imagined. Your ability to embrace change, to be open to new ideas, to confront biases and challenge your thinking, that's where real growth happens.

One quote that has always stuck with me is from Charles Darwin, who said, "It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change." Don't fear change. Let it shape you.

At the same time, like viruses, there are parts of you that will remain constant - your core values. As you navigate change, those core values will anchor you. Hold on to them, but be willing to adapt everything else.

Lastly, and perhaps the most powerful lesson viruses can offer, is to help us understand the **importance of finding our niche**. Viruses are successful because they adapt to environments where they can thrive. HIV finds its niche in immune cells, rabies in the nervous system, and the flu virus in the respiratory tract. Each virus has evolved to specialize in infecting a particular type of cell or host, and they thrive because they've found their niche.

You've found your niche here at UTampa, evidenced by the fact that you're sitting in this room today. You've found experiences that brought you joy, people who supported you, and the resources you needed to succeed. But now it's time to find a new niche, a place where you can continue to grow and contribute.

I'm reminded of a quote by the writer and activist Howard Thurman, who said, "Don't ask yourself what the world needs. Ask yourself what makes you come alive, and go do that."

Because what the world needs is people who have come alive.” Finding your niche is not just about fitting in, it’s about finding what makes you come alive and using that passion to make a difference.

Sometimes finding your niche requires trial and error – again, showing us the importance of embracing failure. Don't be afraid to move on and make big changes when things aren't working. Be intentional about seeking out environments that bring out the best in you, and support others in finding their niche as well.

For the past 13 years, UTampa has been my niche. As I trained in research and teaching, I discovered that my greatest joy comes from working with students like you. This place has allowed me to teach, mentor students in research, and watch students excel beyond what they thought possible. I think many of my colleagues are also in their niche at this University, and that’s part of what makes it so special.

Before I close, I want to leave you with a thought about the power of small actions. Louis Pasteur, the famous microbiologist, once said, “The role of the infinitely small in nature is infinitely large.” You may feel like one among many graduates, one among billions of people on this planet. But I assure you - your impact, no matter how small it might seem at times, can be profound.

Just as viruses, despite their microscopic size, can have enormous impacts on the world, so too can your actions ripple out in ways you might not anticipate. By embracing failure, welcoming change, and finding your niche, you can make a difference. You are not too small to have a huge impact on your community and the world.

Congratulations, Class of 2024. You’ve already achieved so much, and we can’t wait to see what’s next for you.