The College of New Jersey 2016 Phi Beta Kappa Induction Ceremony Matthew A. Wund '99

Thank you so much for inviting me to speak with you tonight at this very special event, and thank you especially members of the Delta Chapter of Phi Beta Kappa for inducting me as an alumnus member. I am truly humbled that my colleagues nominated me, and I am honored to be a member of this cohort of inductees. I know a number of these students personally, and am proud to be inducted alongside of them. Moreover, it's a rare treat to be in a room full of faculty and students when I get to say "I'm with them!" It makes me feel so much younger! Like I've shaved 17 years in only a few moments!

In all seriousness, I am proud to be recognized in part for my accomplishments as a student here at The College of New Jersey, as well as for my role as a faculty member. Before I proceed with my main remarks, I'd like to share a few things about myself that perhaps my own students might not know. I suspect you'll find that we have much in common, and that I'm not so different from the rest of this class of inductees. I was born in suburban New Jersey to hard working, middle class parents. They have associates degrees from community college and very much value a good education. They worked hard so they could send me to good schools, and supported me as I pursued all sorts of interests growing up. While not scientists themselves, my parents are fascinated by nature, and both instilled and indulged my passion for science. I have always been into science, so much so that my grandmother used to joke that I was from another planet. My first official word was "moon" and to this day I am an avid backyard astronomer. One of my favorite places to visit has always been the American Museum of Natural History in New York City--my parents began taking me there when I was about three years old, and I am still a regular visitor, even taking my students there for field trips.

I've always had an especial fascination for anything that far exceeds the realm of everyday human experience--whether it's the vast oceans, the expanse of outer space, and especially the great depths of time that life has existed on our planet, and the profound changes that have transpired across those eons. One of my favorite things to do as a kid was to look out my bedroom window and imagine moving slowly back in time, watching my yard transform from something familiar into a place where dinosaurs roamed. That fascination has never waned, which explains why I pursued a career in evolutionary biology--I want to understand how living things can change so much, leading to such magnificent diversity. So yes, I'm pretty much still in my dinosaur phase.

As I grew up, I did well in school, and eventually was accepted to several colleges I couldn't afford. All the while I kept getting letters from what was then Trenton State College. They seemed to really want me to come, and they offered me a scholarship. And so I came to an open house weekend, and heard a presentation by professor Dennis Shevlin in the Biology Department, who convinced me that this was a fantastic place to learn. He was an excellent salesman, and now 20 years later I'm privileged to have him as a colleague. As I continued to pursue my passion for science, it often took me to places that my parents didn't initially appreciate. Why was I spending a summer chasing snakes in the woods, rather than having a regular job? Why did I go off to graduate school in Michigan to study bats, especially when there's a perfectly fine university system here in New Jersey? How long was graduate school going to take anyway, and what was the point of my dissertation? All of these issues have worked themselves out, because my passion for and

commitment to learning never wavered. And I think deep down my parents realize that I was a science monster that they had helped create, so they had no one to blame but themselves. And of course now they are quite proud of me. This is just a summary of my younger days, but hopefully I have convinced you that our stories are not so different from one another. We are passionate about learning, and our curiosity has led to some amazing life experiences. My work as a scientist and professor has taken me to far off, beautiful places. I've worked with fascinating animals and have brilliant colleagues all over the world. I am a bit farther along on my journey than you are, but trust me that if you remain committed to a life of learning, more great adventures await you.

So I want to offer my sincerest congratulations to you, my fellow inductees. You represent some of the most accomplished members of our truly exceptional student community here at The College of New Jersey. I'm in a rare position of having experienced this institution from both sides of the classroom. As such, I'm often asked what has changed since my time here as a student nearly 20 years ago. I suspect that the friends and relatives who ask this question are expecting me to complain about today's students---they are expecting a "Kids these days!!!" criticism that reinforces their pre-conceived notion of "screen-obsessed" Millenials, who no doubt spend their days texting each other from across small rooms, disconnected from the world around them. But my response runs counter to this narrative, and always seems to surprise them. In the years since I graduated, the aspects of TCNJ I most loved as a student have only become more exceptional. The vitality of academic discourse in our classes, the passion for liberal arts that challenges us to develop breadth of understanding even as we develop expertise in our chosen field of study, the collaborative relationships between students and faculty, the strong sense of community and common purpose-all of these qualities seem even stronger now than they were two decades ago. And from my perspective, today's students are much more engaged in local and global community service than they were in decades past. You fundamentally understand your strong connection to the wider world, and feel both obligated and empowered to improve it. For me, the seeds of these values were planted while I was a student here, but I would say our students today are light years ahead in this regard. It is a real privilege to work with such fine young men and women, and the group of students here tonight play an outsized role in making our entire community very special.

So what *IS* so special about all of you? There are many outstanding academic achievers on this campus---what led our chapter to identify you, specifically, as embodying the values of Phi Beta Kappa? At this point, you should be getting a bit more interested in what I have to say--after all, it seems that I'm about to tell you exactly why you're so marvelous. Or at the very least I have your parents' undivided attention...I promise I'll eventually get to a straight and quite complimentary answer, but like all good scientists seeking the answer to a question, I'd like to start with an experiment--in this case a thought experiment.

As I said before, I'm an evolutionary biologist, so I spend a lot of my time thinking about time, specifically, long periods of time. For my thought experiment, I won't think back very far--just thirty thousand years or so. That's an eye blink in the grand scheme of Earth history, which scientists estimate to be about 4.5 billion years. To put this in perspective, if the whole history of the Earth were compressed into a 24 hour period, modern humans, *Homo sapiens*, have only been on this planet for the last 3 seconds of that day--a mere 200,000 years in real time. So let's imagine that in our quest to find out what makes you all exceptional, we could travel back in time, only 30,000 years. We emerge from our time machine and find a young couple who has just had a baby

girl. Assume that we time travelers from the future don't terrify these folks with our strange clothes, and our *time machine*, so we have some time to observe this baby. Picture the scene in your mind...what is the baby doing? How is she acting?

Most, if not all of you, probably imagined the baby acting pretty much like any newborn baby would today--after all, she's a human being. She has no idea that cars and symphonies and smartphones haven't been invented yet. So most likely this baby is cooing, and crying, wanting to be fed, swaddled, and held. She's probably staring intently at everyone's faces, just like we'd expect any baby to do. Yes, you're probably picturing this all happening in a cave, or around a campfire, or in a temporary hut of some sort, but the baby herself is acting in a familiar way--she's a human being and we know how human babies behave.

Now as you think of that baby, make a prediction about what her life would be like when she is in her twenties. Even if you've never had an Anthropology or Human Evolution course, you probably have some sense that at this point in human history, we had not yet settled down in permanent towns--we were nomadic hunter-gatherers, moving seasonally to follow food sources and avoid harsh climates whenever possible. You can probably picture this young woman gathering food, tending to her children, preparing a meal...

Now let's continue our thought experiment and add a twist: imagine that the parents of this child died, and we found her as an orphan. We decide to take her forward in time and raise her as our own, in modern society with modern technology, nutrition, health care, and education. Now make a prediction about what her daily life will be like when she is in her twenties....Suddenly this prediction becomes a more difficult proposition. Maybe she'll be a businesswoman, maybe she'll be a social worker, maybe she'll be figuring out how to send a probe to the far reaches of the solar system, maybe her artwork will be on display in galleries around the world, maybe she'll be curing a disease, maybe she'll be a teacher, maybe she'll be running for office, maybe she'll be sitting in this very room, being inducted into Phi Beta Kappa...who can say? What we do know is that the diversity of options before her, and her potential to impact the lives of others, will be vastly increased. This difference results not from any substantial change in her innate biological makeup, but only from a change in her circumstances.

So as you've probably figured out, I am not really asking a question about one specific, hypothetical time-traveling orphan baby. I am really wondering what makes us so different from our recent ancestors. Why has our civilization progressed so quickly in the past 10,000 years, and especially so in the past few hundred?

There are of course many complex factors involved, but I propose that the main driver of this extraordinary change has been a commitment to following our curiosity. I'm not just talking about figuring out a better way to build a fire, or a better way to catch food without ourselves becoming food. Surivival is most certainly important, but our species has been doing that for 200,000 years. At some point, some humans began to value learning for the sake of learning--they decided to learn more than what their parents and grandparents knew. At some point we gained the wisdom that in order not just to survive, but to thrive, we have to push ourselves to understand the unfamiliar world around us, the unfamiliar world beyond our immediate experience, the unfamiliar qualities of people who are different from ourselves. This must have been a great risk for those first few

scholars--the pursuit of knowledge for the sake of knowledge does not often come with immediate benefits in terms of putting food on the table, or surviving a harsh winter. Even today, many people consider learning for the sake of learning as esoteric, a hobby only those with time on their hands and ample resources at their disposal can afford to pursue. But I argue that a commitment to pursuing a lifelong, broad-based education isn't an idle pastime---it is the driving force behind the advancement of our civilization. Once some of our ancestors decided to expand the realm of human knowledge, AND to effectively communicate that knowledge so that other like minded individuals could build upon it, civilization was off and running, a long-term payoff worth achieving.

At first glance we might think of advances in science, medicine and agriculture as essential steps to improving the human condition. But this is only part of our success story--improving our ability to communicate has also been essential, not just to convey information, but to express ourselves through literature, art and music. As our lives have become more complex, we need these more complex ways to communicate our ideas and emotions. As I said earlier, what fascinates me most are those aspects of existence that extend far beyond our personal experience, and while science can help us explain the vastness of the universe or the great diversity of life, it is art and music that are best equipped to help us feel connected to such profound and sublime truths. As history has unfolded, we've needed to develop ever more effective ways of communicating with one another--- the more successful we have become, the more we rely upon one another to move different parts of our civilization forward. Understanding the history, practices and values of different cultures improves our relationships and the progress we can achieve together. Engaging in these diverse disciplines is at the core of a liberal arts education, and is a core value of Phi Beta Kappa.

So, finally back to my original question--what makes you all so special? We all benefit from this collective drive to understand and explore the unfamiliar. You don't need to read music to listen to a song, you don't need to understand programming language to use a computer. But someone needed to write that song. Someone needed to write that program. You students in this room tonight, you are not passengers in this grand adventure, you are in the cockpit. You are among the drivers of this collective effort. You are the creative and committed scholars that will guide the continuing human journey. And knowing this, I feel hopeful for the future.

Thinking back on my own college career, many of my favorite courses were outside of my major: philosophy courses, creative writing, sociology, a course exploring cultural anthropology through art--these have enriched not only my personal life, but have made me a better scientist, a better teacher, and a better citizen. This is because I am a better thinker...a better communicator, and most importantly, I have a better sense of how my contributions fit into the context of society. I would venture to guess that if each of you compiled a list of your favorite courses at TCNJ, the liberal learning program would be well represented.

So you are being honored here tonight because you embody the best qualities of our truly exceptional student community here at TCNJ. You have embraced this experience as an opportunity to become more than you were when you arrived. You didn't come here to reinforce what you already knew, or what you *thought* you knew. You realized early on that a diploma is not a "job ticket," but instead represents a significant achievement. It reflects the diverse knowledge and skills you've acquired, and also the quality of character and intellect needed to be successful at an institution like The College of New Jersey. And because you have been the brightest examples of

this core value--a passion for and commitment to learning--you have been invited for membership in Phi Beta Kappa, our nation's most prestigious honor society. I am confident that you will live out this value for the rest of your lives and that you will make us proud. Congratulations.

Thank you.