PENN'S MAY 22 COMMENCEMENT

Invocation and dismissal given on Sunday, May 22, 2022, by Charles Howard, Vice President for Social Equity and Community and University Chaplain.

Invocation and Dismissal

Invocation

In many ways, the graduation story of these amazing individuals was disappointing. After the years of study and research and growth, they and their families were denied the opportunity to process down Locust Walk, robed in these magnificent colors and robed in pride and joy and then to stand here in Franklin Field and have their degrees conferred in person. It was a sad and even painful ending.

Charles Howard

And yet, perhaps there is a beautiful lesson in the way their story has played out.

After all they have been through. After the pain, the frustration, the ups and downs, after the early career adventures they have had, after all that has passed…

They have come back and are teaching us the great lesson:

That it is never too late.

It is never too late to turn around and finish what you started.

It is never too late to try again or chase a dream held in your heart. Never too late to apologize and right the wrongs of the past.

It's never too late to change directions and leave unhealthy habits behind us.

That it's never too late to go back to school

Or to learn a new hobby.

That it's never too late to love.

And never too late to celebrate.

And So Faithful One, we give you thanks for these patient individuals,

Thank you that they have come back home to their Alma Mater to complete some unfinished business.

Bless this very special day and Bless this very special class. Amen

Dismissal

This wasn't the way we planned it back in 2016, but sometimes life takes us down paths we didn't anticipate.

Every now and then the unplanned detours lead us right where we are meant to be.

Fellow Alumni,

May all of your steps be ordered, even the surprises that may befall you.

May your paths take you on amazing adventures.

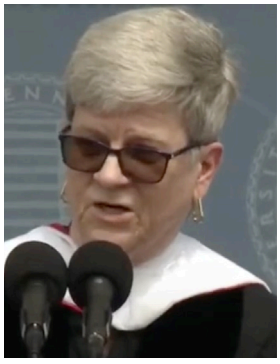
And may your path from time to time lead you back to Penn. Congrats Graduates!

Remarks given on Sunday, May 22, 2022, by Kathleen Hall Jamieson, Elizabeth Ware Packard Professor of Communication and Director of the Annenberg Public Policy Center, who served as chair of the Faculty Senate in 2020-2021.

Combatting COVID and Mis/Disinformation

On behalf of the Faculty Senate, I bring congratulations to the graduates and well wishes to their families and friends.

This is both a joyous and sad occasion. Many have lost loved ones in recent years, some to COVID-19. Graduates, you are the living legacy of the family members and faculty mentors who made this day possible for you but did not live to celebrate it with you. Please join me in pausing to honor their memory.



Kathleen Hall Jamieson

Your class graduated into a world rife with disease and disinformation. The Penn community undergrads, grads and faculty alike, did something about both.

From the start, Penn's newly minted nurses and doctors picked up PPE along with their diplomas and entered emergency rooms to save lives.

We owe plaudits as well to the graduates of Law, Vet, Dental, Design, Wharton, SP2, Engineering, Education, Annenberg, and SAS, for innovations in ventilation and waste water testing, redesigned workspaces, COVID-detecting dogs, accountability journalism, exemplary teaching, resilience-inducing literature and art and so much more..

For their fearless fight against disease, those in Penn's labs also deserve our lasting gratitude. For proof, would those who've gotten the Pfizer or Moderna vaccine, please raise a hand. Penn researchers Drew Weissman and Katie Karikó created the technology that made the messenger RNA vaccines possible. I propose memorializing their achievement—which in the annals of Penn should rival the creation of ENIAC—by revising the Penn anthem to say:

Fair Harvard has her crimson.

Old Yale her colors too.

But the mRNA vaccines that busted COVID

came wrapped in red and blue.

However, vaccines can't work without vaccination. So Nursing professor Alison Buttenheim co-created Dear Pandemic to help the public understand public health issues and FactCheck.org's COVID corrections were

Abutted to deceptive content on Facebook

Carried as 15 second PSAs by iHeart radio,

Featured in the search sidebars on Google,

Amplified by Univision

and cumulatively garnered more than 100 million impressions.

Penn's collective response to the pandemic can be assessed by the standards implied by Franklin's adage: "Either write something worth reading or do something worth writing." Ben did just that by editorializing in support of smallpox inoculation, by counteracting disinformation that falsely alleged that Ben's four year old son had a died as a result of inoculation against small pox, and by tasking the nation's first hospital with caring for the sick poor.[1]

In like fashion, where Factcheck.org and Dear Pandemic are worth reading, Penn doctors and nurses and the mRNA research of Weissman and Karikó are worth writing and even singing about.

So are our graduates.

After more than thirty years of recommending Penn undergrads and grads for internships, honors, fellowships, and jobs of all kinds—I have concluded that Penn selects its students, faculty, and trustees for what Franklin called the ability and disposition to serve and to do well by doing good.

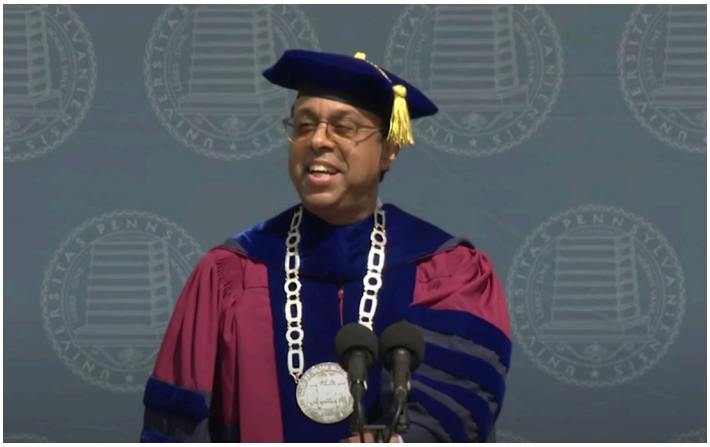
The faculty knows that you will do both because through more than two years of COVID you already have.

Again congratulations from the faculty and we look forward to continuing to cheer your accomplishments.

[1] https://www.uphs.upenn.edu/paharc/features/creation.html

Penn Commencement Address delivered on Sunday, May 22, 2022, by Interim President Wendell Pritchett at Franklin Field.

Oft-Delayed But Never-Deterred



Wendell Pritchett

Good morning!

Here they are in Franklin Field at last: the oft-delayed but never-deterred, most amazing, most incredible, Class of 2020!

And let me just say: You look terrific! Two years older and likely ten times wiser, you are undoubtedly the most magnificent class ever to assemble in Franklin Field. Congratulations! And welcome home.

Even through the darkest days of the pandemic, we did not doubt this day would arrive. We knew we would be here, ready to welcome you back. However, there was some worry that maybe you would forget us.

Impossible, no? How could you forget Penn?

But just yesterday, our wonderful chair of the Board of Trustees, Scott Bok, said to me, "Wendell, they've been gone for two years. Before that, we sent them home for the pandemic. Will they even remember what this place looks like?"

I said, "Of course they'll remember! They love Penn. They understand Penn. They know Penn. They're veritable Penn Professionals!"

But Scott wasn't so sure. He said, "I'm going to pull out my phone and take a few pictures of a couple of typical places around campus just so they can prove they still truly know Penn. You can show them the pictures and quiz them at the start of your speech."

So I said sure. He is my boss. And what could possibly go wrong?

After all, Scott loves Penn. Scott's incredibly smart. Scott's a wonderful guy. But there is one thing you have to know... May I have the first picture please?

[*On screen appears: The Button close-up*]

Scott has a wicked sense of humor!

So OK Penn Professionals—where are we? Go ahead, call it out.

[*Call Out Answers from Audience*]

Yes! That's right!

[*On screen appears: Ben On the Bench*]

We're on the bench with Ben! That was Ben Franklin's frock coat sleeve button.

May I have the next picture please?

[*On screen appears: Light Disc close-up*]

Now where are we?

[*Call Out Answers from Audience*]

Yes! That's right!

[*On screen appears: The Button sculpture*]

We're beneath the Button, at the heart of Penn!

Now how about this?

[*On screen appears: The Quaker mascot ear close-up*]

[*Call Out Answers from Audience*]

Yes! Got it again!

[*On screen appears: The Quaker*]

We're home again, in the company of dear friends.

Now just one more.

[*On screen appears: Underneath Stadium Stairs*]

Where are we right now?

[*Call Out Answers from Audience*]

Yes! Right again!

[*On screen appears: Franklin Field Exterior*]

We're here on historic Franklin Field. The oldest collegiate football stadium in the country. Home to the renowned Penn Relays. Site of the first-ever radio broadcast of a football game in 1922, and the locale for generations of toasts to dear old Penn.

Two years ago, at your virtual commencement ceremony, we reminded you that this is also the place where—nearly 90 years ago—President Franklin Delano Roosevelt spoke these prophetic words in accepting his party's nomination to run for a second term as president.

[*Audio recording voiceover of FDR with slides*]

"There is a mysterious cycle in human events. To some generations much is given. Of other generations much is expected. This generation of Americans has a rendezvous with destiny."

At the time of that speech—in 1936—our nation was challenged with economic and social upheaval the likes of which had never before been seen. In Europe, the winds of war were blowing. The world's very future was at stake.

President Roosevelt ended his acceptance speech declaring the nation was not battling just a Depression but was actually at war for the survival of democracy. "We are fighting to save a great and precious form of government," he said, "for ourselves and for the world."

How far away that seems today!

And yet how very close.

Two years ago, in your family living room or apartment room or wherever you attended your online commencement, the world seemed turned upside down. You had bravely and resolutely soldiered through two long months of pandemic restrictions. And in that moment, we all wondered, 'How much longer can this go on?!'

Remember that? I do!

None of us fully appreciated how readily two months would turn into two years, with still no definitive end of pandemic insight. Young, healthy, in the primes of our lives, we so often did not truly expect to encounter death, as so many of us now have.

We could not foresee how bitterly contested the presidential election of 2020 would become. We expected the final conclusion would come with one candidate gracefully conceding to the other. The sight of a violent insurrection storming the Capitol, attempting to overturn the vote of the people by force, was simply unimaginable. And today, in Europe, once again, the winds of war are blowing.

Think now of President Roosevelt's words, spoken on this very location 86 years ago: "It is a war for the survival of democracy. We are fighting to save a great and precious form of government for ourselves and for the world."

A Rendezvous with Destiny sounds exciting and romantic... until you are forced to live through it.

If we are honest with ourselves today, we must concede that the past two years have been disorienting and dismaying and sometimes, downright frightening.

And yet, I say this with absolute conviction. We are not disheartened. We are not discouraged. We will not despair.

This amazing Class of 2020 gives us unbridled hope for the future. You are the generation of which much is expected. And you have, unequivocally, proven yourselves fully equal to the task.

From the outset, you have done what needed to be done. You have met every challenge; you have overcome each obstacle. You have remained calm. You have carried on.

You have found—within yourselves—stores of resourcefulness and resilience you would not have known were there, until you were forced to call upon them.

Three years ago, in the halcyon days of 2019, you did not worry about saving lives preventatively, or preserving democracy perpetually for the peace and security of future generations.

But such has been your lot. You have been called – not once, but repeatedly—to step up, to stand forth, to stay the course calmly through storm and turmoil.

Standing here with you today, none of us can truly say when these demands of service and sacrifice and extraordinary effort will come to an end. Nor is it possible to know what great concerns will challenge us three years, or three decades, from now.

But we know this. Because we've learned this from you and at the hand of hard experience.

Best not to do it alone. Community counts. We are in this together, and it is only from one another and with one another that we can truly hope to survive and to thrive.

This will always distinguish you from any other Class: the deep bonds of human connection forged in times of adversity. You will always be one band, bound together by your shared experiences and sacrifices.

Yet I can confidently predict that what today has been a burden, tomorrow will seem a gift. It will help you succeed and grow and make a difference for all your days.

There is a tradition that goes back many years at Penn, that when we come to this point in the program the President concludes by asking the audience to stand, and by applause, show their great appreciation of the graduates.

Today, this tradition never seems more apt, more appropriate, more warranted. Classes of 2020 and 2021: Please remain seated.

Friends, family members, guests, members of the faculty and all here with me on the dais today: I ask you to stand with me. Today is a day of celebration. Today we honor an amazing group of young people who in so little time have already given so very much. Please join me in showing our respect and love and appreciation for these wonderful and magnificent graduates.

Graduates at Penn's May 22, 2022 Commencement ceremony for the Class of 2020 and the graduate students in the Class of 2021.

Penn Commencement address delivered on Sunday, May 22, 2022, by Angela Duckworth, Rosa Lee and Egbert Chang Professor in the School of Arts and Sciences and faculty co-director of the Penn-Wharton Behavior Change for Good Initiative and Wharton People Analytics at Wharton School.

Commencement Address

Angela Duckworth

Hello, students! It's hard to imagine a warmer welcome, especially for our family and friends.

But to the graduates, I just want to say this: We have missed you!

I guess it's my job as your commencement speaker to pay tribute. Beth mentioned your resilience, your determination. But you've already heard a little bit of that, and I think you know that already. And today, I'd rather tell you something that you don't know. Something less obvious.

My message today is this: You are a paramecium.

I can tell some of the faculty and students know a little bit about the paramecium because, well, you're looking a little nervous! The more you know about the paramecium, the less this seems like a tribute. After all, the paramecium is among the most primitive or organisms. It's just a fifth of a millimeter in length at full maturity, just one cell, all in. You, on the other hand, are perhaps the most sophisticated creature on planet Earth. Each of you are composed of trillions of cells. And a lot of those cells are up here [points to head]. They give you something the paramecium lacks altogether, and that is a human brain. A brain that can set goals and make plans, dream dreams, and chart a course to get you there. A paramecium can't do any of that.

And yet, the brainless paramecium survives and thrives. And it does so using one basic principle: If things are getting better, keep swimming in that direction, and if not, change course.

Let me give you an example: The water is too hot, it's too cold, there's not enough to eat, the paramecium gets stuck. It simply backs up and it tries another angle. It happens again, it backs up and makes another pivot. If this keeps happening, the paramecium may have to do something more radical, like even do a 180. But eventually, kind of like a Roomba vacuum, the paramecium finds a way to move forward again.

In other words, the paramecium makes its way in the world through simple trial and error. And this is usually all the paramecium needs—to get unstuck, to find nourishment, to keep making its life better.

Now, at this point, the families might especially be wondering, why did I fork over so much tuition money to have a brainless, single-celled organism as a role model? But I hope to convince you that the paramecium principle has something valuable to teach us all. Let me explain.

As Beth mentioned, I am a professor; I specialize in the psychology of achievement. I've studied the Green Berets, NFL quarterbacks, winners of the National Spelling Bee. I've interviewed Olympic gold medalists, Nobel laureate scientists, Grammy award-winning musicians. So often, when I've asked these remarkable women and men, "how do you feel about your work?" They've looked me straight in the eye and they've said, "I love what I do." Observing these high achievers at the peak of their careers, I've found they're incredibly dedicated to their craft. They're voluntarily obsessed—relentlessly obsessed, even in the face of setbacks and failure. This combination of passion and perseverance is what I call grit.

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Early in my research on grit, I concluded that a high achiever chasing a long-term goal is a lot like a speedboat racing full-throttle towards some distant shore. You may wonder, where does such unshakeable conviction come from? Graduates, you may be panicking because you're not sure you have that kind of conviction. A lot of the recent graduates who I've been talking to lately—they tell me that they had more clarity about what they're going to do with their life when they were at their high school graduation compared to today!

Well, for you especially, I have good news. More and more, I am convinced that the vast majority of world-class performers struggled for years figuring out where they were heading. Today's paragon of passion and perseverance for long-term goals was yesterday's paramecium, wandering around, figuring things out through trial and error.

Take Joel Embiid, center for the Philadelphia 76ers, five-time MBA All-Star, the highest-scoring player in the MBA this season. Joel has said that one day, he aspires to be the best basketball player in the world.

But growing up in Cameroon, Joel was passionate not about one sport, but two. And guess what: Neither of these sports was basketball. The question in young Joel's mind was whether to pursue soccer or volleyball. And his first real game of basketball didn't happen until quite late in his athletic career—speaking to athletes here, sixteen years old, which is quite late for someone who is going to be pro.

New research shows that Joel is not the exception—in fact, the best athletes in the world typically were not always specialists. Instead, growing up, they typically played a variety of sports. Compared to lesser competitors, they commit to their main sport later in life. Compared to athletes who had a head start in that sport, they tend to make slower initial progress.

The same pattern holds for the world's best scientists. They tend to take a much longer, winding path than you might imagine.

For instance, one recent study compared Nobel prize-winning scientists in Germany to close peers who were not quite as accomplished. Nobel laureates were actually less likely to have won a scholarship as a student. And, deans, they took longer to be promoted to full professor.

Okay, yes, there are exceptions. Of course there are! But the rule is this: Before specializing in one thing comes sampling a lot of things, including the things you eventually quit.

You may not realize this, but you already know how to live life, according to the paramecium principle, because when you were a little kid, you picked up a toy, you played with it for a little while, and then you dropped it and you picked up another. When you were a baby, you put things in your mouth, and if they tasted bad, you spit them out and you moved on to something else. Young children have everything to learn, so they naturally gravitate to sampling. Of course, you can't sample forever and expect to get good at anything—the older you get, the more logical it becomes to specialize. A big reason why is that, with every passing year, you know more. And, TBH, you have less time left to make use of those lessons.

Graduates, perhaps achieving the milestone of this degree makes you feel like time is running out. But, relatively speaking, you're young. In fact, over the last two centuries, human life expectancy has doubled. In other words, compared to Penn graduates from 1820 and 1821, you quite literally have a lot more living to do. For you, sampling makes even more sense!

My research suggests that, graduates, years from now, you will have a more focused, developed passion than you do today. But, even then, I recommend making a little room for sampling. New research on creativity shows that the most dazzling chapters in a professional career—what scientists sometimes call "hot streaks"—they're proceeded by periods of heightened sampling.

For instance, just before their hot streak, movie directors, painters and scientists tend to sample a lot—trying one thing, dropping it, trying another. Sampling isn't just for the young. It's never too late to sample. At any age, there's enormous value in exploration, in chance encounters, in cross-fertilizing what you already know well with an entirely new idea altogether. Sampling opens the door to serendipity.

Personally, I thank the paramecium principle for helping me become the specialist I am today. When I started college, I was pre-med. I assumed I'd graduate, go right into an MD/PhD program, become a medical school professor, just like dad told me I should. None of that happened. As Beth mentioned, I spent a full decade after my graduation with no idea where

Penn's in-person Commencement ceremony for the Class of 2020 and the graduate students in the Class of 2021 took place at Franklin Field on May 22, 2022.

I'd end up. Right out of college, as Beth said, I started a summer school for kids. I ran that for two years, then I decided to change course. I entered a program in politics, philosophy, and economics. In the middle of that program, I learned that I do not love politics, philosophy, or economics. So I switched—I got a master's degree in neuroscience after that. Again, as Beth mentioned, I did management consulting for a year. I quit that, became a seventh-grade math teacher, and so on, and so on.

In total, I zigzagged through a half-dozen different career paths before landing here, at Penn, starting a PhD in psychology at the age of 32. My journey looked nothing like a speedboat racing full-speed toward a distant shore. Though I was hardworking, I was nobody's idea of passion and perseverance aimed at a single long-term goal. Instead, I was a paramecium.

Graduates, my advice is to not worry if you don't have your whole life mapped out right now. If you feel a little lost, try something new—a new job, a new city, a new friendship. If you feel like things are getting better, keep going in that direction, and, if not, change course. It's messy, it's kind of random, it's unplanned—all things that high achievers like you sometimes struggle with. The paramecium principle is understanding that, when you sample, instead of optimizing same-day performance, you optimize long-term learning.

Let me conclude by telling you about the scientist who helped me prepare for today's remarks. His name is Romain Brette and he lives in Paris. [Person in audience: Woo!] Shoutout to Paris! He's a world expert on the paramecium. After asking him all my technical questions—"Romain, how does a paramecium move?" "Romain, how does a paramecium eat?"—et cetera, I asked him to tell me how it was that he'd gotten so fascinated with this particular microorganism. Romain told me that, originally, he'd expected to become a computer scientist. That's what he went off to study. "But, I was really bored," he told me, "because it was really theoretical, not really fun. It's not what I wanted to do, anyway."

So Romain changed course and started doing math on neural networks. "So artificial intelligence was more interesting to me," he said, "but at the same time I was a bit disappointed, because I don't know"—and no offense here—"but it was just math." Again, Romain had to back up and pivot. "I wanted to go more and more toward understanding the biology of neurons, so I did a PhD that was basically between math and neurobiology, and then I moved more and more to biology, and, well, here I am today!"

After listening to his story, I couldn't help but exclaim, "Romain! You are a paramecium!" And he laughed and said, "aren't we all?"

Thank you very much and congratulations.