The Honorable Sethuraman Panchanathan, director of the U.S. National Science Foundation
Commencement Address (transcript) – Sunday, May 21, 2023

PRESIDENT GARIMELLA:

It is my special pleasure to introduce Sethuraman Panchanathan as this morning’s speaker. As you just heard, Panch’s accomplishments are vast, and his stature as national and international leader in research, education and science and technology policy, cannot be matched. To me, however, Dr. Panchanathan’s most impressive characteristic is his inspiring nature. His vision for science, research and innovation is deeply inclusive and wonderfully collaborative, and when he speaks you feel his desire – and you cannot help share his desire – to bring people from all backgrounds from all around the world together to solve global challenges. I can think of no better person to address our graduates today as they step forward to change the world.

Please join me in welcoming the honorable Sethuraman Panchanathan.

[applause]

DR. PANCHANATHAN:

Thank you very much. Hello, Catamounts, how are you all doing today?

[cheering and applause]

Wow! What a beautiful day is it? Oh, wow, it’s amazing, I could not have asked for any better. I first of all want to thank Dr. Garimella, he has been very very kind to me with his words. But let me tell you, he is an unbelievable leader; I’m not doing it because he talked about me. He truly is an outstanding leader.

Yesterday in the dinner I talked about him in the construct of “Vermont” – as a visionary leader V; as an energetic leader, E; as an unbelievable researcher in his own right, R. As a person who is amazing in terms of how to lead, he has every aspect of what it takes to be a phenomenal leader. He’s an opportunistic leader, he’s a national leader; he’s a transformational leader.
I'm so delighted to call him a friend and a fellow board member. He was also appointed by the president to the National Science Board and I'm so thrilled to have him as a fellow colleague. He chairs our committee of strategy on the Natural Science Board. So I just said to everyone last night at dinner you're very fortunate to have an unbelievable leader in Dr. Garimella, so thank you Dr. Garimella.

[audience applauding]

And it is truly an honor to share this podium with Dr. Michele Cohen and Dr. Mark Levine. Unbelievable amazing leaders for our nation and the state of Vermont. So it's truly an honor to be with you today and join you today in receiving this unbelievable honor.

I want to thank the chair of the board of trustees, Ron Lumbra. Thank you, sir. It was truly a pleasure meeting you and all the trustees who made this honor possible.

I just thought that how might I give this commencement address?

And I remembered my own commencement address, and asked myself the question: “do I remember anything about the commencement address?”

[audience laughing]

Nothing.

[audience laughing]

So I said, how do I make sure that people will remember the commencement address rather than feeling like I just want to get the hell out of here?

[audience laughing]

Enough old people talking, we have business to do here. So I thought, why not frame it around Vermont? This way, you will never forget it. You are the graduates of the University of Vermont and that you will never forget.

[audience applauding]

And it's an honor. It's an honor to be a fellow Catamount.

[audience cheering]
First “V”, and I’m going to quiz you on this - you don’t get your degree until you pass this quiz. I checked with the president and the provost.

So here is “V”: this is a day of victory. For every one of you, it's a day of victory. Victory with all the challenges, all the obstacles. All the things that you would've thought about and said am I ever going to see this day of graduation? But yet, you persisted. You persevered. And here you are: you are victorious. Congratulations folks.

[audience applauding]

But remember that this victory is not yours alone, quite the contrary. As the President said, you owe this to your parents, to your family, your friends, your teachers, your mentors, and all those fellow colleagues who cheered you, inspired you, motivated you. And most importantly the faculty of this great university, the University of Vermont. So I want every one of you, as I stand and thank my parents for this day today, and all the people, my teachers, my mentors, who made this possible, and expressed my gratitude – I want all of you to get up, turn around, look at your family and say a big thanks. Because it is because of them that you are victorious today. Let's do that first.

[audience applauding as graduates stand and turn]

Thank you. They have your gifts ready for you.

[audience laughing as graduates sit]

“Vermont”, let's not forget that framing - Victorious.

Next “E”: excellence.

Every one of you has the spirit of excellence that permeates through you, because of your fantastic work that you've done over the last many years at this great university, inspired by the faculty and your colleagues. You have done great work. That spirit of excellence permeates.

But remember, grab hold of it. Grab hold of it, and mentally picture today. There will be days where you will be challenged; where you will find moments of despair. Then close your eyes again, remember this day and think of that spirit of excellence that permeates through you, still permeates through you and will guide you and make sure that you continue to be successful in your lives. And therefore make sure that you remember this day that way: that “I am excellent.”
And typically excellence is often thought of as relative to something else. Competition is thought of as something that we look to and therefore we need to do better. Competition is never about the competitor. It is always about you. Does this competition make me even better, even stronger, even more excellent than I have ever been?

That's what competition is. So whenever you see competition in your life – you will always see that all through your life – remember, it is for you. It is not about the competitor. And therefore how can we be better? By expressing this unbelievable spirit of excellence that is in you already.

“E”: excellence.

“R”... This is a great university. I had a chance to visit with some of the faculty and students yesterday and interact with them. The research mindset that permeates this university is truly awesome. You all possess that research mindset. Research mindset is not just about a project that you completed. It's about the curiosity that all of you have. That curiosity that made sure that you every day got up and said “how can I get answers to this curiosity that I have?”

“How can I have answers to those questions that I have?”

Every day has been that quest for ensuring that that curiosity, you're expressing it in the form of making sure that you acquire more talent.

And so you possess this research mindset. I can tell you that is going to carry you through everything that you will do in your life. This curiosity, this ability to be able to ask the right questions, find the right information, make evidence-based decisions, this is going to carry you through your life. So hold onto it. Hold onto that research curiosity. Never let that go.

Never let that go.

The “M”... This moment that the chair talked about, this moment is a very special moment for all of you. You are the COVID era students who graduated, who survived, who persevered, who persisted.

You are – [audience applauding]

You are a unique generation as was beautifully spoken by the student representatives. You are a unique generation. You have gone through difficulties and know how to persevere. You have shown your creativity, your innovative mindset in order to transcend the challenges and do even better.
And this opens up new possibilities. President Biden talks about possibilities - new possibilities for you, new ways of doing things, new ways of constructing things, new way of tackling problems, new way of finding solutions.

So make sure that you seize this moment that has made you very special, and hold on to that specialness. Hold on to the special features that you've gotten as part of having lived through the COVID moment.

That is the “M”, the moment, and all the things that came with the moment: seize it, hold onto it, and express it all through your lives.

The “O” is opportunities. “O” is about opportunities, “O” is also about obstacles.

Every obstacle is an opportunity. Always about the opportunities. And I'm going to tell you a nice story about opportunities. I was so thrilled to see Justin come and talk about his amazing journey. I'm going to talk about another student's amazing journey. His name is David Hayden. David is a visually impaired student. Was a visual impaired student, is a visually impaired grownup adult now.

In 2007, David walked into my office and said, “Dr Panch, I hear that you are building devices and technologies for assisting individuals with a range of disabilities particularly visually impaired and blind students. Can you help me?”

I had a research center focused on building technologies and devices.

He came to me and he said, “can you help me with devices? Because I'm a freshman student double majoring in math and computer science. I've always been a good student, but now I'm starting to have some challenges. I go to my classes. I sit in the very first row. I still cannot follow the steps in a mathematical proof or in a computer science algorithm. Can you help me?”

I said, David, how about this? Instead of me helping you, you come and work in the lab alongside other students in my lab and you will design the device that is not only going to help you but is also going to help all other students like you, David.

He took my challenge. He came into my lab. I surrounded him with other undergraduate research students, master students, PhD students, postdocs, faculty members; everybody working together from different disciplines. And he designed the device that was sorely needed in order for him to be able to be successful.
The very first semester in his sophomore year, he brought a tablet pc. He got a USB interface to a off-the-shelf camera.

[something happens off-camera] That's not a signal to finish my talk right?

Because they told me I have a lecture slot of 50 minutes. [audience laughing]

So this lecture that was not accessible to him, he brought it through that camera into his tablet pc. What he could not access, he was able to get it right where he could actually see it. But he did not stop there. He built a software interface to split the screen virtually into two halves. One half was this video of the lecture coming in and he was freezing frames that he wanted to freeze and learn. And the other half, he developed a notes interface to write his course notes and linked the course notes to the video and the images.

Within a semester more, at the end of the sophomore year, he had this beautiful contraption, the device that he built that he took to all his classes.

And he came and asked me Dr. Panch, can I multiply this more and give it to other visually impaired students so they can give me feedback?

I said, absolutely.

He got feedback from other students. Perfected the device even more. Worked with other students from other disciplines in design, and designed the most economically nice interfaces.

And in the junior year, the second semester of the junior year, he came to me and he said “Dr. Panch there is a competition called the Microsoft Imagine Cup. Can I submit my prototype to the Microsoft Imagine Cup?”

I said, yes, David, of course you should do that.

So he submitted his prototype to the Microsoft Imagine Cup. He won the regional competition and then went on to the West Coast competition; beat some universities like Stanford and Berkeley and others’ students. Went to the national competition. Beat students from MIT and Carnegie Mellon and others.

There were 11 categories. This was a touch and tablet category in which he submitted his. Then went to the world competition in Poland there were 325,000 entries in 11 categories. And in his category, he called me at 3:00 AM from Poland and said, “Dr. Panch, I won the world competition.”
He had an obstacle, which he came with two years back. In two years as an undergraduate student, he beat out all the students and ideas of all levels, master's, PhD, from all the institutions.

But he didn't stop there. He challenged himself even more. The next year he went to the software design category won the national competition again. Did an internship at NASA. Went on to do his PhD, got the graduate research fellowship of NSF. Two labs were fighting for him at MIT. He went, finished his PhD at MIT, and now works for one of those companies in the Silicon Valley designing driverless cars.

This is what is possible: when there are obstacles, you can turn them into opportunities, and you can make them unbelievable outcomes - the other “O” - by engaging in these, and not only benefit you but benefit a lot more people. Every one of you, every one of you is endowed with those kinds of opportunities and you'll have more of that in your life. So turn those opportunities into meaningful outcomes. Turn those obstacles that you will face into opportunities, therefore you can have more meaningful outcomes. That's the “O” of Vermont.

When is he going to be done? - Only “N” and “T” left. [audience laughing]

The “N” is about network.

It is never about just you. It is always about the team. Wherever you go, all through your life, there will always be the team of people that you will work with. That's how you make real progress: working in a team, working together with a purpose and a passion.

And that's what you need to do every day as you leave this great institution, make sure that you continue to work in a team. And great things can be accomplished by you, because the network of people is what is going to propel you and your ideas and your opportunities forward.

And finally, with the “T”.

You have come here into this institution, just for a moment focus on the very first day you arrived in this campus and what you are today. There is a huge transformation that has happened within you. You have transformed yourself. This journey of transformation, as the president said is not a culmination, it is a beginning and a continuation of that transformation journey that you're going to see through all your life.
But remember, it is not just about transforming yourself. As much as you transform yourself, you also want to transform the community, the society, and everyone around you and lift them all up.

You are one of those very privileged people, a quarter of them, who have the opportunity to graduate with these amazing degrees and opportunities. There are so many of those still left behind and I implore you today, every one of you should at least take 20 to 25 young minds, mentor them, lift them up, particularly from those communities that don’t have the chance for them to see this amazing potential that all of you have realized. So take this moment and make sure that you endeavor, and promise to yourself that my life's journey will not be complete unless and until I lift up another 25 people. By inspiring them, by motivating them, by being there for them and lifting them up, and so they too can contribute.

[audience applauding]

They too can contribute to our country. Our country needs all of the talent, the missing millions of talent everywhere across our great nation, rural, urban, across the socioeconomic demographic. Across the rich diversity of our great nation. All of them deserve a chance. It is our responsibility.

[audience applauding]

And now the quiz.

[audience laughing]

V –

[Crowd] – Victory.

E –


R –

[Crowd] – Research.

Research mindset! M –

Opportunity, overcoming obstacles, to create great outcomes. Three Os I cheated.

[audience laughing]

N –

[Crowd] – Network.

T –


Go Cats! Congratulations!

[audience applauding]