

# Rector's speech

## Doctoral Awards Ceremony

### Rector Gunnar Bovim's speech

Doctoral Awards Ceremony 16 March 2018

The Aula, The Main Administration Building, NTNU

«To our new doctoral graduates and honorary doctors, our guests, colleagues and friends.

Congratulations! Today, we are celebrating 176 new doctoral graduates from NTNU.

Soon you will be awarded your doctoral diploma as tangible evidence of what you have achieved. There are no shortcuts to this. It means ambition and hard work. It means having a goal on the distant horizon – and never losing sight of that goal. As you see behind me above the entrance to the library, people were already thinking about this in 1910. The text is: *Per aspera ad astra* – through difficulties to the stars.

A doctorate is the highest level of formal education in Norway. But although it is at the top of the education pyramid, I have an important request to you – as soon as you've had a chance to get some rest. People who think their education is finished are not educated, but finished. Don't stop now.

Our nation and the rest of the world are facing vast changes. This will demand new technological solutions. But it also demands constant development and education for us humans.

This is where NTNU and other universities come in. We have a key role in Norway's development. And you doctors are among the most important agents for change. You transform knowledge into ideas and practical solutions for tomorrow's working world. That does not happen by itself.

In 1676, a humble Isaac Newton wrote these words in a letter to his rival, Robert Hooke:

*"If I have seen further, it is by standing on the shoulders of giants."*

Isaac Newton meant that his discoveries would have been impossible without the knowledge he had inherited from those who had gone before him.

Dear PhDs, even if it doesn't always seem that way: Someone has gone before you.

Your predecessors have been working with education, research, art and innovation for a long time. When this interaction works at its best, knowledge can truly flourish and bring change into our society. Whether it involves electrification, digitalization, building a culture, health, or the development of society.

So the big question for us is:

What role should NTNU and other universities play in all these changes?

In the Minister of Foreign Affairs' speech to the Storting, the Norwegian Government highlights a world of great contrasts:

On one hand, more and more people are climbing out of poverty.

On the other hand, economic gaps are growing and we are reminded that earlier victories for democracy, freedom, and human rights cannot be taken for granted.

Digitalization opens unimagined opportunities. But at the same time, social media concentrate much power in few hands when large companies gather huge amounts of data, rich with information.

We regularly witness school shootings out there in the world.

Here at home, we have just had the première of the film about the 22nd of July, one of the most brutal experiences our nation has ever gone through. The 22nd of July was an attack on our democracy. It is still an open wound in our political landscape, as the debates in social media and the Storting show. This makes it even more important for us, as owners of democracy, to protect the right of young people to participate. We cannot each build up our own closed democracies on Facebook based on a "like" and "share" philosophy. Our democracy must be resilient; it must tolerate openness. So, as knowledge curators, you need to use your wisdom and engagement.

Our first reaction when someone comes to us is welcoming and inclusive. Not rejection and fear. We who are privileged must be the most eager to share. And as a university, we must contribute to that.

We must be there as free and independent institutions in the service of democracy. We must take responsibility for cultivating knowledge, creativity and critical thinking. NTNU must be the guarantor for achieving this.

That is why we set ambitious goals. That is why our vision states: "Knowledge for a better world."

We who are close to your knowledge development see the power that knowledge holds. Knowledge gives people opportunities and influence. Critical thinking means that attitudes and mindsets change the world. Use the knowledge you have to develop wisdom. Because wisdom develops through knowledge.

Through your work, you have each contributed to everything we have been talking about. For example:

Andreas Finnøy has completed a PhD in biophysics where he used a new technique to look at the disease osteochondrosis.

Jo-Kristian Stræte Røttereng has raised questions about carbon capture and storage as a climate policy.

Astrid Helene Brodtkorb has studied dynamic positioning of vessels to increase their performance.

And last but not least, there is every reason to mention Rune Elvik. Today he is receiving his fourth PhD in road safety. A brilliant example of never completing your education.

Never before has it been this good to be alive. Much of that is inherited from previous generations, exactly as Isaac Newton said.

Now you have gained new skills. That makes you the managers of the knowledge we will pass on to the next generations. They will stand on our shoulders. Because together we share an opportunity and an obligation to make our planet a better place. Here, we call it Knowledge for a Better World.

Congratulations.»