

# Tiina Raevaara

“**The things revealed** to us by science can be incredibly awesome and mind-boggling. A non-fiction writer can reveal knowledge about the world that is hidden from the wider public. This sounds slightly esoteric, but science popularization is a truly inspiring and great way to create wow experiences”, says Doctor of Philosophy, non-fiction writer and former researcher Tiina Raevaara.

Raevaara was awarded the 2021 Pro Scientia Prize by the Finnish Academy of Science and Letters. The prize is awarded to an advocate for science, i.e., a person or instance that has significantly promoted the role of science in society by speaking out, writing or engaging in other activities to the benefit of science. Awarded since 2017, the prize is worth 10,000 euros and is awarded every two years.

“The coronavirus pandemic once again showed why science is important. It can ultimately even be a matter of life and death, but also all the practical things that need to be done during such a crisis. Sci-

ence was present the whole time the virus was being identified. How the virus is transmitted, how dangerous it is, how infected persons should be treated, how society should respond to this virus wave, how vaccines should be developed... Science walked beside us every step of the way as we lived through this crisis”, says Raevaara.

In her opinion, one of the new missions of science could be related to living in a state of uncertainty. Scientists and science communicators could better prepare society and people to live in a long-term state of uncertainty.

“We expect science to give us certain answers, which in itself is characteristic of humans. But science can rarely produce answers that are certain, especially in crises where situations can change unexpectedly. During the pandemic, we also saw disappointment in science, for example in the debate on face mask recommendations and vaccines. The key is to communicate uncertainty and prepare people for situations

“We must be able to communicate uncertainty as well”



that may be like this, but may also change – we simply do not know and right now we just need to continue living our lives”, says Raevaara.

Having left one crisis to go into another one, we need a new approach to deal with the rapidly developing flood of information.

“You cannot be a free rider in a knowledge society. You cannot just look for certain knowledge around you, but you should somehow learn to get along with that uncertainty and realize that there are many possible end points for situations. You should not let yourself fall into a pattern where you put all your trust in one piece of knowledge and when that proves

to be wrong, you feel a deep sense of disappointment in all knowledge and all knowledge producers.”

The pandemic revealed that deducing what we should do based on scientific knowledge is not so straightforward.

“Knowledge exists, but what should be done with that knowledge is another story – and that is a matter of value judgment. We may not see the impact until years later. We’ve seen that we can prevent a staggering number of deaths, but at the same time we’re isolating the elderly and causing social exclusion among young people.”

Finding reliable knowledge in this flood of information is an enormous problem. Is the future hopeless?

“Sometimes I do feel slightly pessimistic. Rather than obtain more information, we should somehow learn to eliminate unnecessary information. As a non-fiction writer, I think that that is precisely what we need in this day and age: someone to screen that information and put things in context and perhaps reveal brand-new perspectives on a topic”, says Raevaara.

Amidst the chaotic war news, people also have to learn ways to recognize the bias in their own thinking.

“I’ve started to doubt myself as a consumer of news. When established Finnish media tells me that the Ukrainians have shot something down again somewhere, I believe it’s completely true. But sometimes I wonder whether the fact that we’re feeling so optimistic for

Ukraine could produce slightly biased journalism. And do I, as a reader of news who is affected by the confirmation bias, notice only the news that are good from my point of view, which in turn makes me see things in a more positive light than they really are?” says Raevaara thoughtfully.

The non-fiction writer’s mind is at peace in the forest, walking with her dogs or otherwise enjoying nature. Another crucial counterbalance to work is “hard and crazy” exercise, currently CrossFit.

“When unfinished work stuff is churning in my mind, a great way to balance this is to spend one hour a day thinking only about whether I’ll survive through one more repetition and one more breath”, says Raevaara.

Photo: Jussi Helttunen