

## Sci-Vi – Visualization and animation in science dissemination

**Sci-Vi is an initiative** which seeks to explore and unfold visual science dissemination as a field, to improve science communication through visual storytelling and animation. The initiative aims to strengthen cooperation between scientists and visual storytellers, and investigate potentials and possibilities in a broad community.

The Sci-Vi initiative is a partnership between The Animation Workshop/VIA University College, Viborg Municipality and the Creative Industry Cluster Arsenale. ([www.scivi.dk](http://www.scivi.dk)) The main Sci-Vi activities are the Sci-Vi Community, Sci-Vi Cases/Productions and the annual Sci-Vi Conference.

## TED-Ed Animations – Ideas that change the world

One of the collaborations under the Sci-Vi initiative are a series of Ted-Ed Animated video lectures. In the following article, the Hungarian producer, **Ágota Végső**, tells more about this collaboration.



**Ágota Végső**, Producer, Project Manager at TAW / VIA UC - PhD student at NOVA FCSH Lisboa

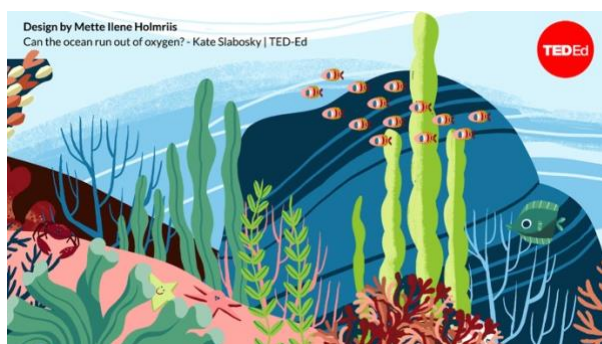
Ágota was born on the 10th of June in 1987, she is a Hungarian animated film director, illustrator and producer. She finished her studies at the Moholy-Nagy University of Art and Design (MOME) in Budapest. She attended ASF – The Animation European Production Workshop in 2012, and had the opportunity to participate in the Open Workshop program at The Animation Workshop in Denmark in 2014. Since then she has been working for The Animation Workshop being responsible for the collaboration with TED-Ed and other animated projects related to science, education and talent development like the [NipponNordic](#) and [NiNoKo Universe Accelerator](#) in collaboration with Japan and South Korea.

## Animation is not just a magical tool but a way of thinking. Animation entertains, explains and educates!

*Ágota Végső, Producer and Project Manager at TAW / VIA UC. PhD student at NOVA FCSH Lisboa*

The [Animation Workshop/VIA UC](#) has cooperated with [TED-Ed](#), the educational initiative of [TED](#), since 2014 to create better communication about all kinds of science.

We consider science as the best challenge of humanity. Our job is to share the facts, “true news”, of humans in a way that all members of the community can understand. That’s why we find it essential to create educational videos via the internet, to make these information available to as many people as possible. The Animation Workshop participates in this mission by finding talented animators who can think with the researchers and educators and create the best ways to understand these facts.



Throughout the years the partnership has grown and created more than 30 lectures together, and has been represented at several international film festivals. The lectures about ‘Schrödinger’s Cat’ and ‘Thor’s Journey’ have had over 5 million views, ‘Arachne’ have had over 6 million views, while 6 other videos have over two million views each.

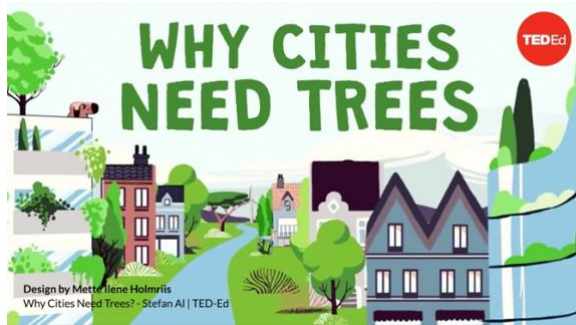
It was not just the quality that got better but also our interest to understand the potential in these online animated video lectures, and how we can get better. Our mission became to share information about important issues with the general public in a way that everybody can understand worldwide. In this image-based era animation gives us the opportunity to explain almost anything, even complicated problems in a simple way that preserve validity. During the last 6 years we covered various fields from STEM as well as history, literature and social topics. The voice-over is in English, but subtitles are available in more than 20 languages.

As a producer and production manager I realized that in the collaborations the animators are not just tools to visualize the research, but by thinking together with the researchers they add to the research process. These collaborations not just help to get more visibility, understanding and support, but help the research to be more effective. I always choose the animation director according to interest.



The animators have to be interested in the project and willing to read and study to understand it better. On the other hand, the researcher has to be interested in new visual approaches and trust the artist who is the master of their visual fields. They know the best way to express the data and processes in animation that everybody will enjoy and understand.

This fusion creates an example of great science communication. There is no *one* good way to create science communication effectively, it is the topic that determines the best visual way to express it. For example, to visualize how a stem cell chooses which cell type it will become, it could be better to show it as a gameplay where the storytelling is non-linear as is the biological route. We can e.g. design a VR Game (Virtual reality) interface for this process to explain it the best way.



In 2020 we have dedicated our Ted-Ed collaboration to create lectures about the alerting topic of climate. We are interested in raising awareness about climate consciousness in everyday life - like how trees are changing the life quality of people living in cities or how the complex dam system of the Netherlands was created. At the moment we just released several new videos including topics about saving endangered animals, following the life cycle of coral reefs, and working on topics like the right usage of plastic bags or how humans evolved to adapt to the changing life circumstances of its habitat. These videos will be shown at the world climate summit called COUNTDOWN organized by TED in October 2020 in Scotland among other climate conscious videos and presentations. We are glad to be part of this mission to spread information about important issues and change people's attitude and behavior for a better, cleaner, and greener future.



**Online videos produced between 2014 and 2020:**

1. [Particles and waves: The central mystery of quantum mechanics](#)
2. [What is the Heisenberg Uncertainty Principle?](#)
3. [Schrödinger's cat: A thought experiment in quantum mechanics](#)
4. [Einstein's brilliant mistake: Entangled states](#)
5. [Cloudy climate change: How clouds affect Earth's temperature](#)
6. [How we think complex cells evolved](#)
7. [The law of conservation of mass](#)
8. [How do geckos defy gravity?](#)
9. [The mathematical secrets of Pascal's triangle](#)
10. [The surprising reason you feel awful when you're sick](#)
11. [Who IS Sherlock Holmes?](#)
12. [Can computers feel emotion?](#)
13. [The evolution of animal genitalia](#)
14. [How do nuclear power plants work?](#)
15. [The genius of Marie Curie](#)
16. [Who built Great Zimbabwe? And why?](#)
17. [Who's at risk for colon cancer?](#)
18. [The myth of Arachne and Athena](#)
19. [The myth of Thor's journey to the land of giants](#)
20. [What dust is made of?](#)
21. [What is the universe expanding into?](#)
22. [The life cycle of a neutron star](#)
23. [The courageous life of Ida B. Wells](#)
24. [The sexual deception of orchids](#)
25. [How to spot a pyramid scheme?](#)
26. [Prester John, the imaginary king](#)
27. [Why isn't the Netherlands under water?](#)
28. [Why cities need trees?](#)
29. [The benefits of yoga](#)
30. [The last living members of an extinct species](#)
31. [Can the ocean run out of oxygen?](#)