



# Planktomania

3D technologies to promote education and outreach on plankton

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Plankton is invisible to the naked eye, yet it plays key roles in aquatic ecosystems and in global biogeochemical cycles. It produces 1/2 of the oxygen in the atmosphere, it is at the basis of aquatic food chains and it comprises an amazing diversity of life forms.

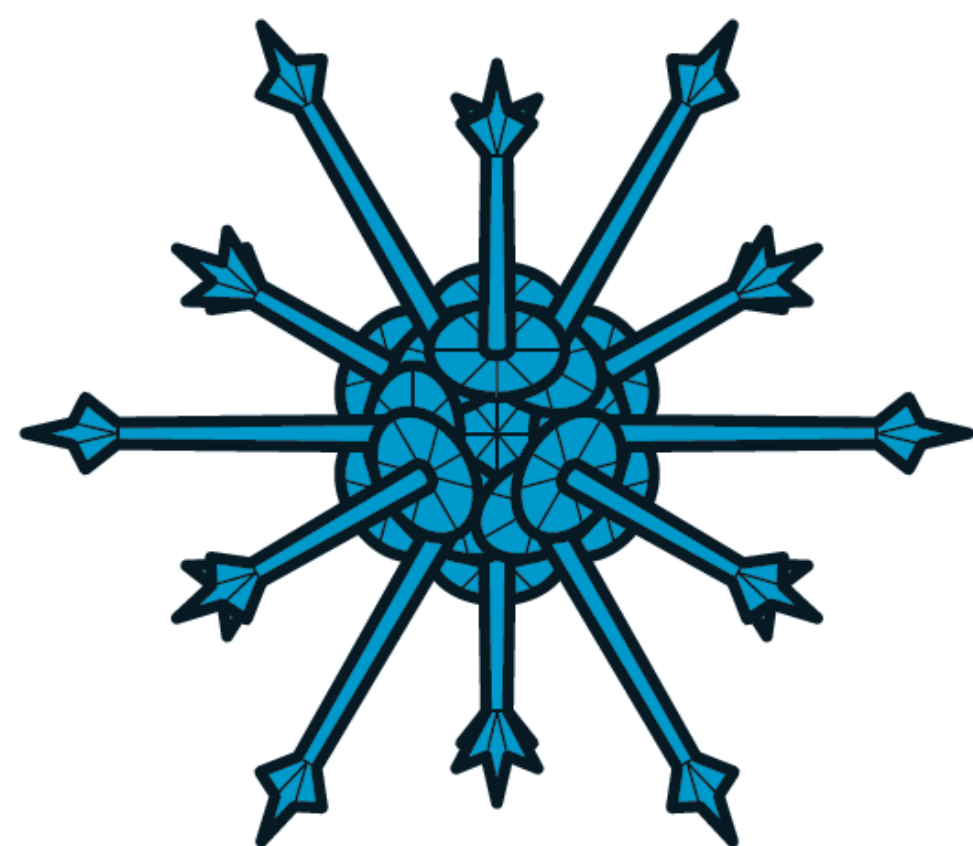
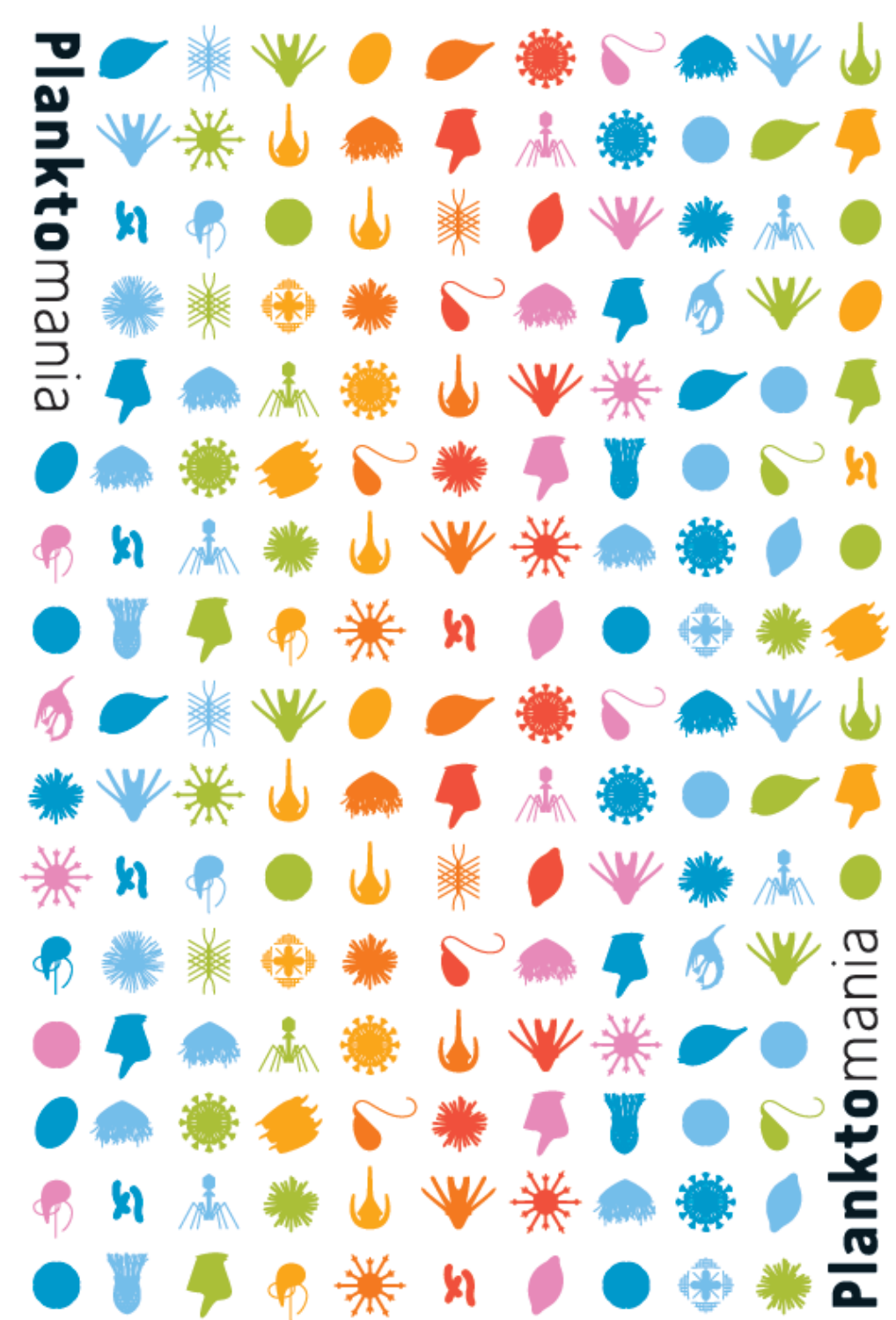
Planktomania carries general public and kids into the fascinating world of plankton in 3D thanks to unique tools created specifically to facilitate the discovery of the amazing shapes and life histories in this microscopic world. Virtual and augmented reality are promising educational tools enhancing attention and effective learning.



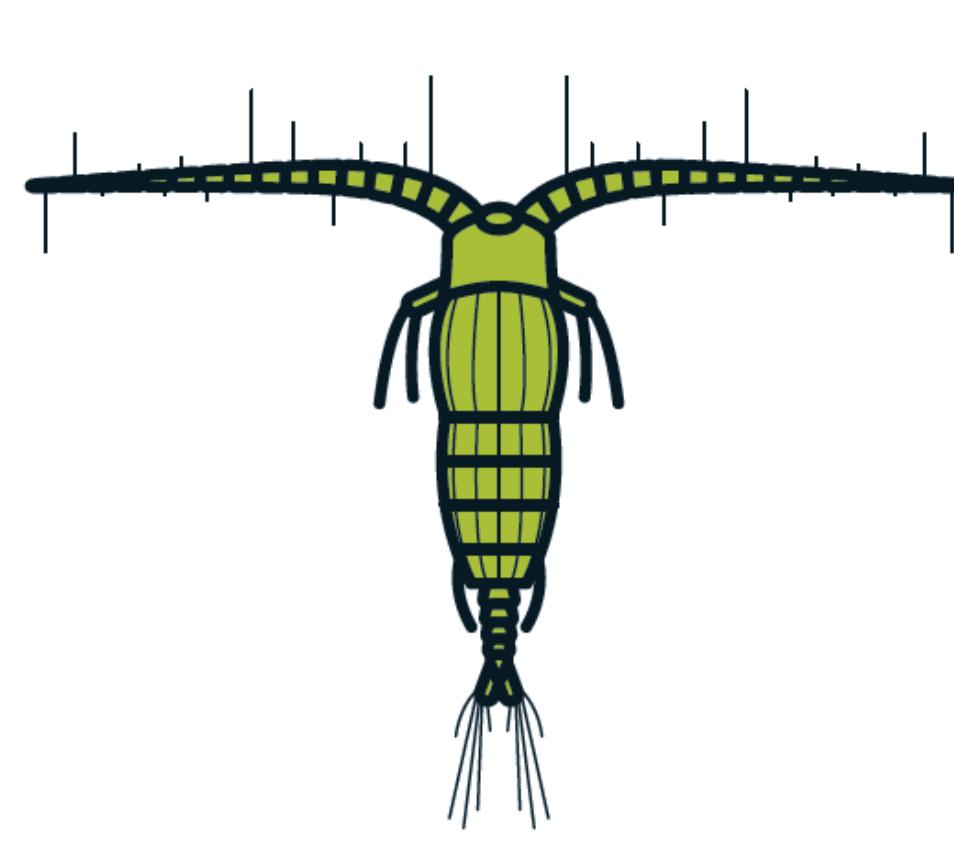
## Augmented Reality



With Planktomania Happy Families you can play the traditional Happy Families card game, while at the same time learning about the plankton via augmented reality. Using a smartphone or tablet you can use each card to launch interactive educational content (quizzes, videos, 3D illustrations of plankton, etc.).



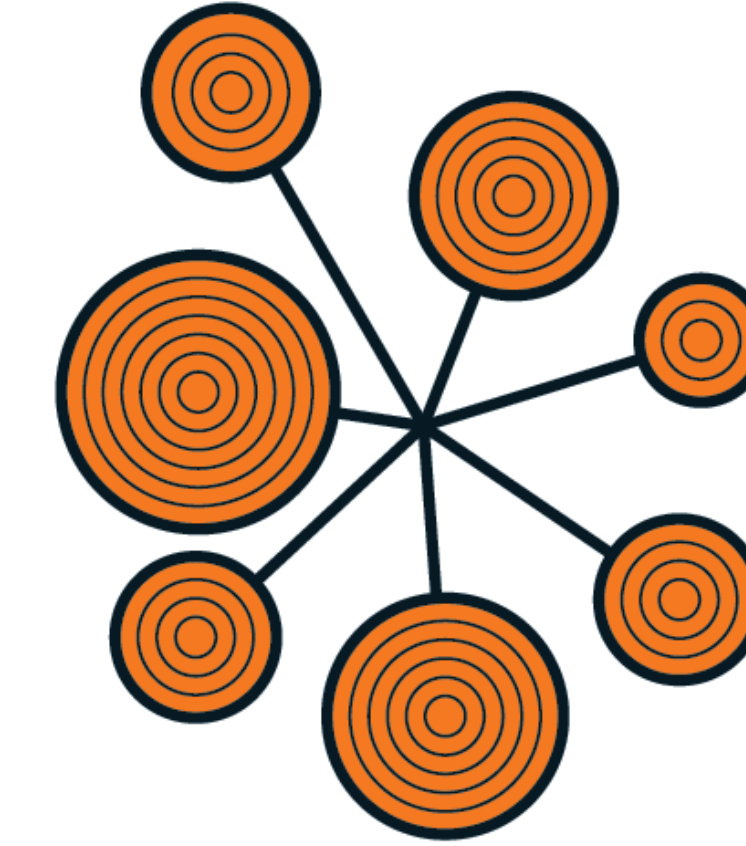
Coccolithophore  
*Rhabdosphaera sp.* 0,0015mm



Crustacean  
*Copepoda* 0,3mm



Identify  
DNA signature



Plankton diversity

## The Planktobox

The planktobox is composed of tools and educational content specifically designed for a broad public. The kit facilitates discovery of plankton, notably through the use of new technologies such as virtual reality, augmented reality, and 3D printing.

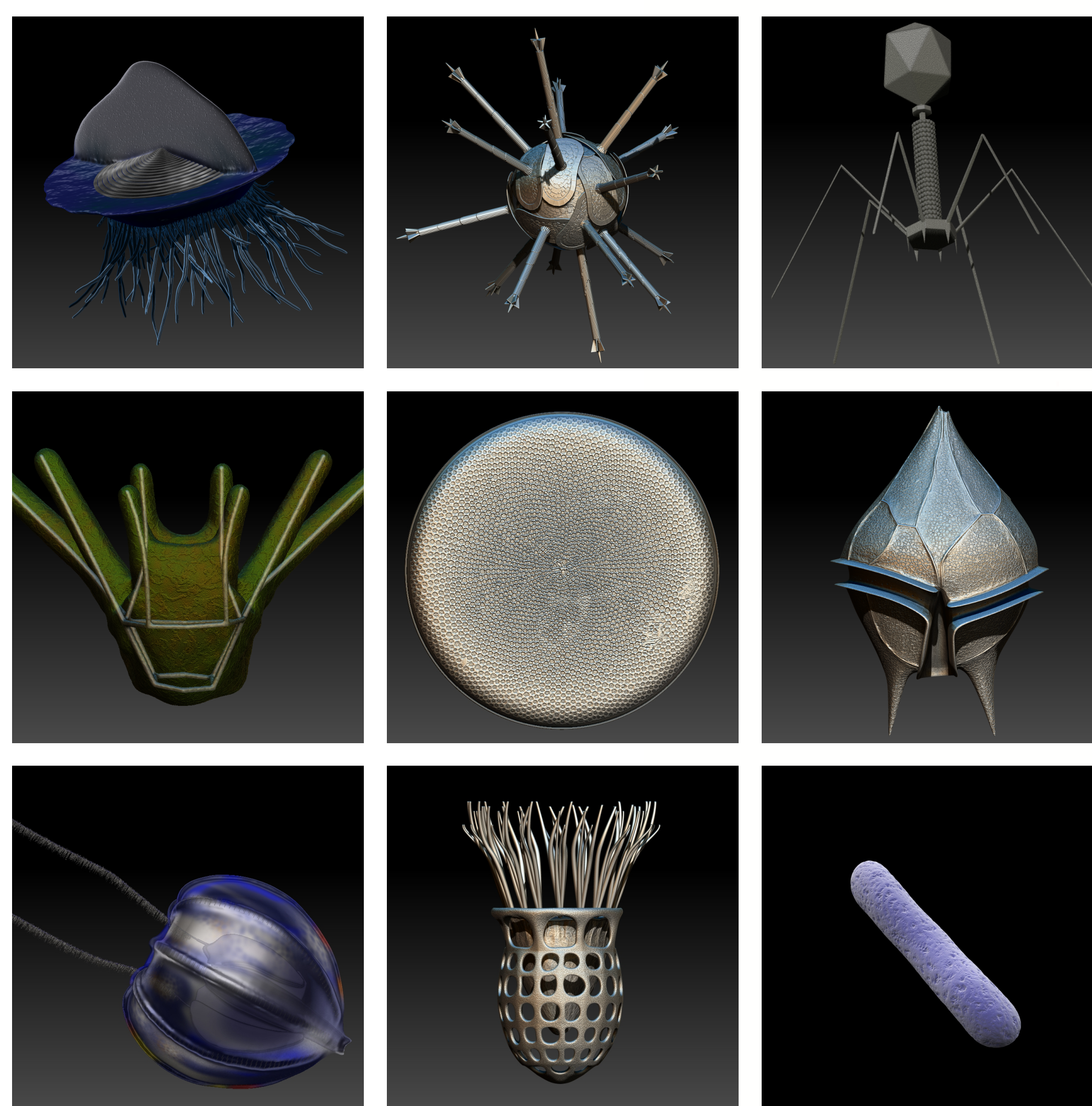
-  3D prints of plankton
-  Guide booklet for animators and public
-  Illustrated book on plankton
-  Field microscope
-  Kit to collect plankton
-  Oculus gear for virtual reality
-  Happy Families augmented reality card game
-  Water proof tablet and smartphone for display



## Virtual Reality

Dive into the world of plankton, from jellyfishes to viruses, through an immersive 360° animated film.

**The plankton as you've never seen it before !!**



More than 35 3D models of plankton, from viruses to jellyfishes, were created based on microscopy images and discussion with experts.



Planktomania was launched in July 2016 at the Brest International Maritime Festival (France) where it attracted more than 15 000 people over a week. The next steps include working on additional educational content (films, 3D models, etc...) to match school curricula. Initially developed in French, English and Breton, we also intend to make it available in other languages.



Station Biologique  
Roscoff



Océanopolis  
Brest



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