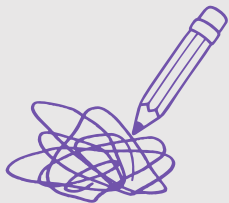


design competition entries - 2025



SILICA, SYMBIONTS & SURVIVAL

THE SECRET LIFE OF PODOCYRTIS

IndTalks

Functional Advantages of Morphological Change

- **Enlargement of pores** means there is more surface area for pseudopodia extension, which improves feeding efficiency. In addition the ability to capture larger prey increases.
- **Thickening of the skeleton wall** allows for increased structural strength in turbulent waters. This may have also allowed them to live in a wider range of water depths, enduring more water pressure.
- **Expansion of the abdomen** creates a large internal volume, enabling more space to host symbiotic algae.

MORPHOLOGICAL EVOLUTION OF PODOCYRTIS

P. MITRA P. CHALARA P. GOETHEANA

What are Radiolarians?

- Radiolarians are tiny, single-celled organisms with elaborate siliceous skeletons that float in the world's oceans as part of the plankton. These microscopic protists, which range in size from 30-300 micrometers, are found at all ocean depths.
- Upon death, their silica skeletons sink to the ocean floor, where they are preserved in sediments and provide valuable records of past ocean conditions.

Summary

- Podocyrtis radiolarians live in symbiosis with photosynthetic algae, feed on bacteria and protists, compete with diatoms and protozoa, and themselves feed larger microorganisms and zooplankton.
- They are a hub in the microbial web, linking photosynthesis, predation, nutrient cycling, and long-term geological deposition.
- This allowed Podocyrtis to succeed in Eocene oceans and to play a major role in marine carbon and silica cycles.

#microbeart2025

2025 | Affinity Designer 2 | 2D Illustration | Layout design

This design was inspired by radiolarians, which are microscopic marine organisms. I was fascinated by their architectural-like structures, despite existing at a microscopic scale.

I decided to highlight the geometric symmetry and delicacy of radiolarians. The biggest challenge was not over-detailing, real radiolarians are extremely complex. I had to decide where to simplify without losing their identity.

If I revisited this work, I'd experiment more with depth, layering and colour gradients to push the 3D quality further.



CRISP submission, titled 'Enduring Chronic Pain'

2025 | Affinity Designer 2 | 2D Illustration

Pain is often invisible and difficult to communicate. By breaking it into visual metaphors, this piece connects to broader conversations around chronic pain and how we interpret internal experiences that others can't see.

The biggest challenge with this piece was balancing multiple metaphors without the piece becoming visually overpowering. I had to manage composition and contrast so each element remained distinct but still felt part of the same experience.

Subsequently, I was picked by the University of Bath as [one of the three winners](#) with this submission.