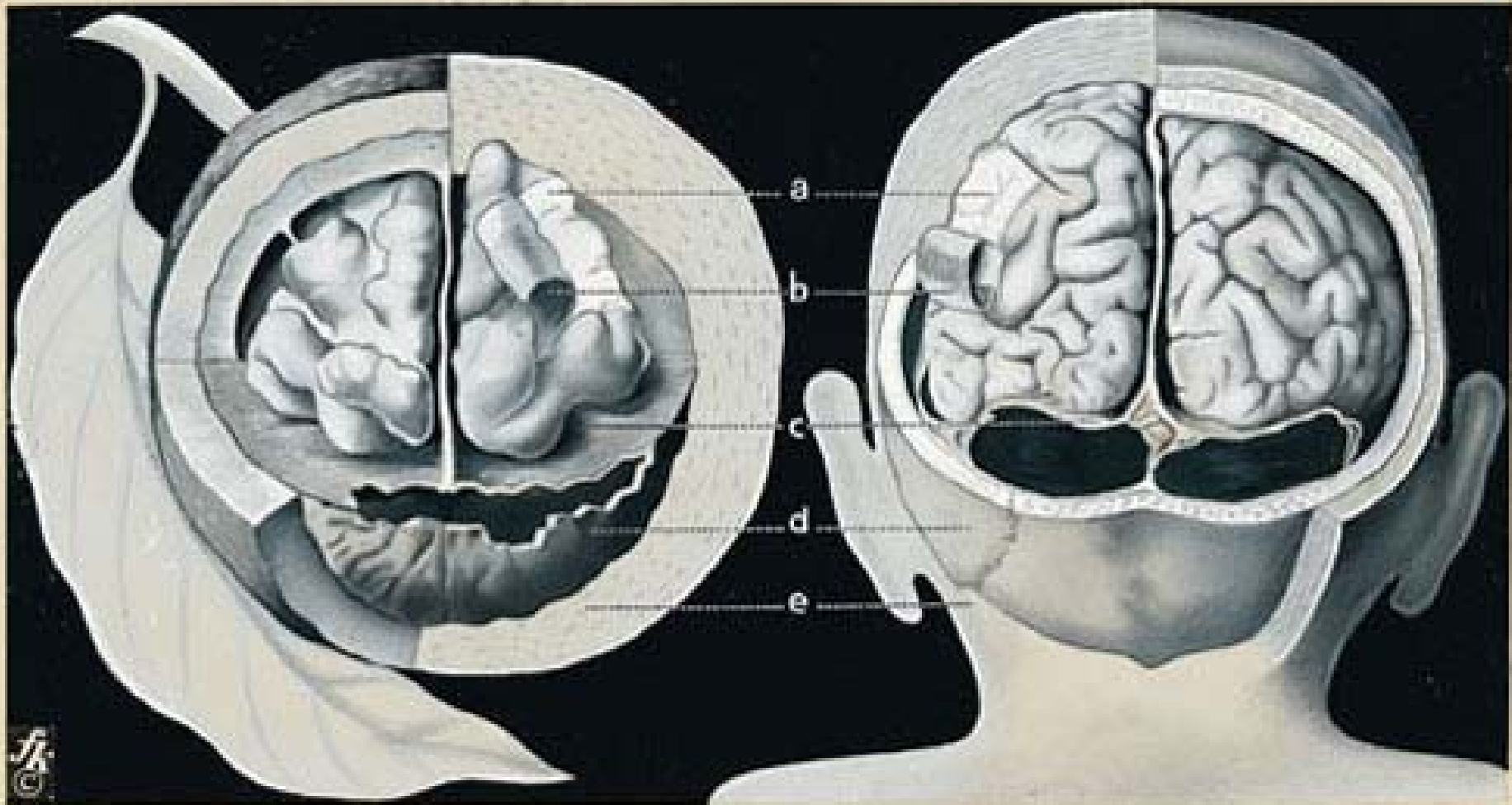


Imparare l'innovazione dalle piante

Renato Bruni

Università degli Studi di Parma
www.erbavolant.com



176 Walnut and human brain



Daltonismo vegetale

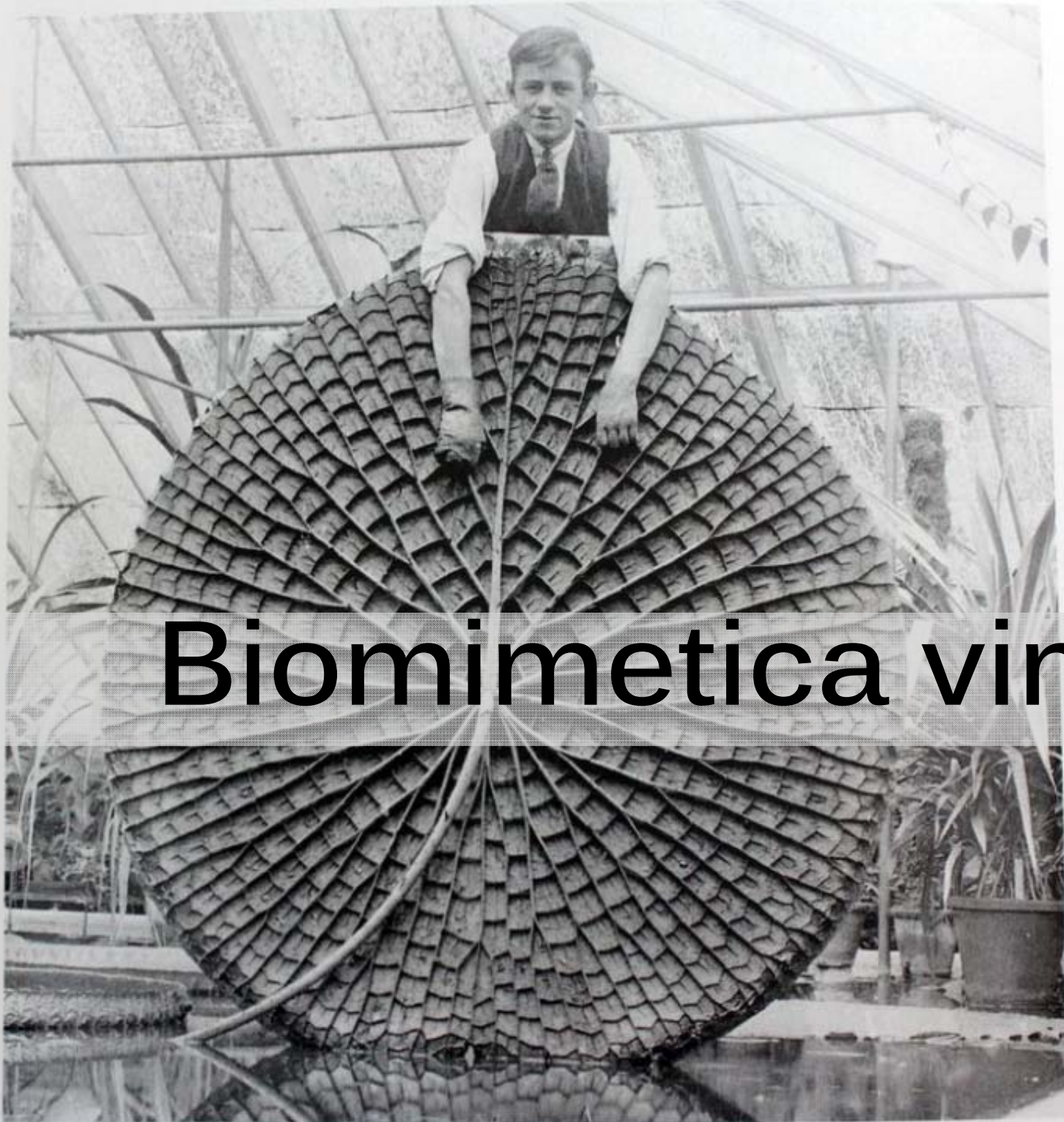


Lo studio consapevole dei processi biologici, biomeccanici e chimici della natura, come fonte di ispirazione per il miglioramento delle attività e tecnologie umane. La natura viene vista come modello e guida nella progettazione di artefatti e strategie e l'evoluzione viene "usata" come un laboratorio di R&D.



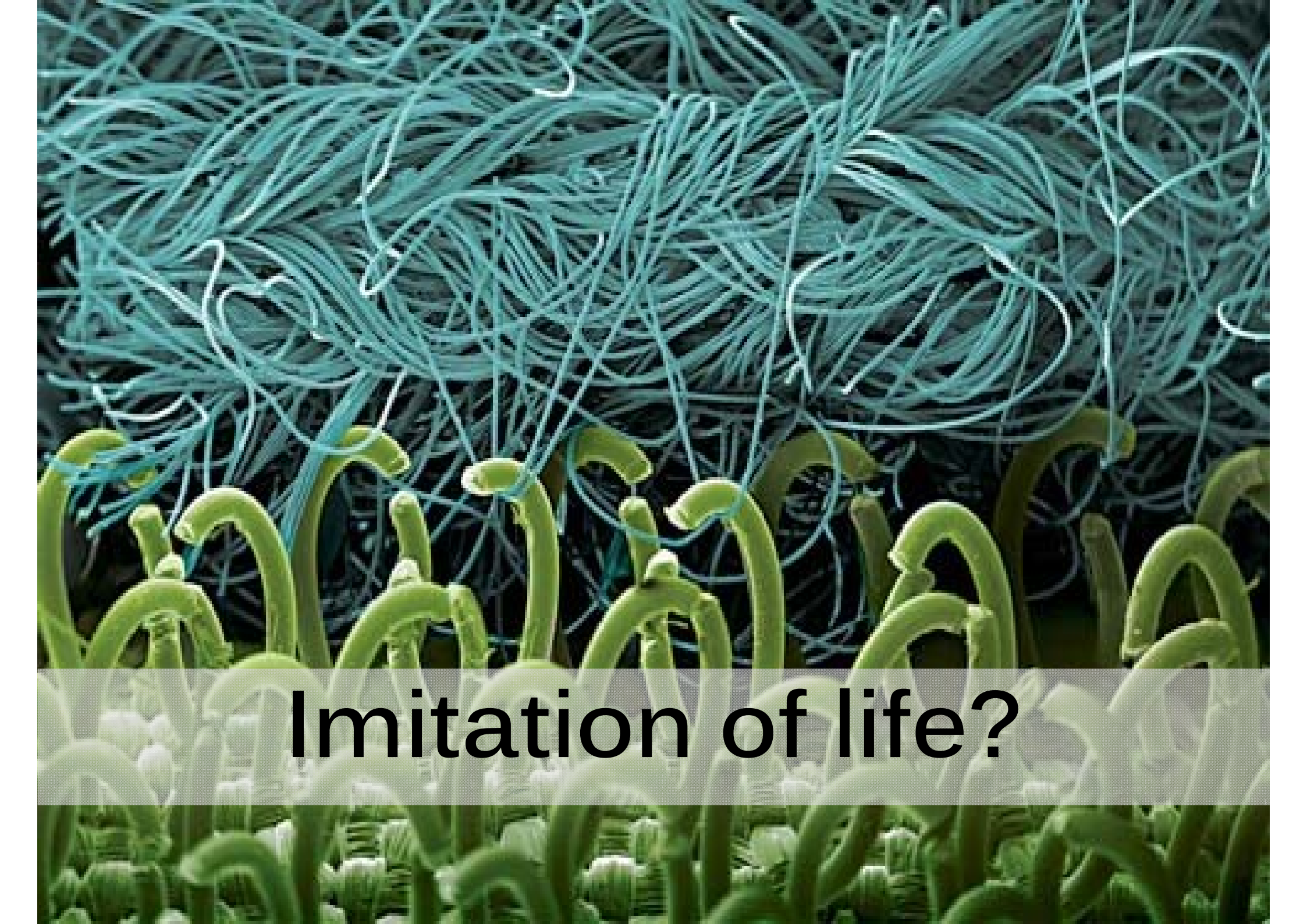
Nani sulle spalle dell'evoluzione





Biomimetica vintage





Imitation of life?



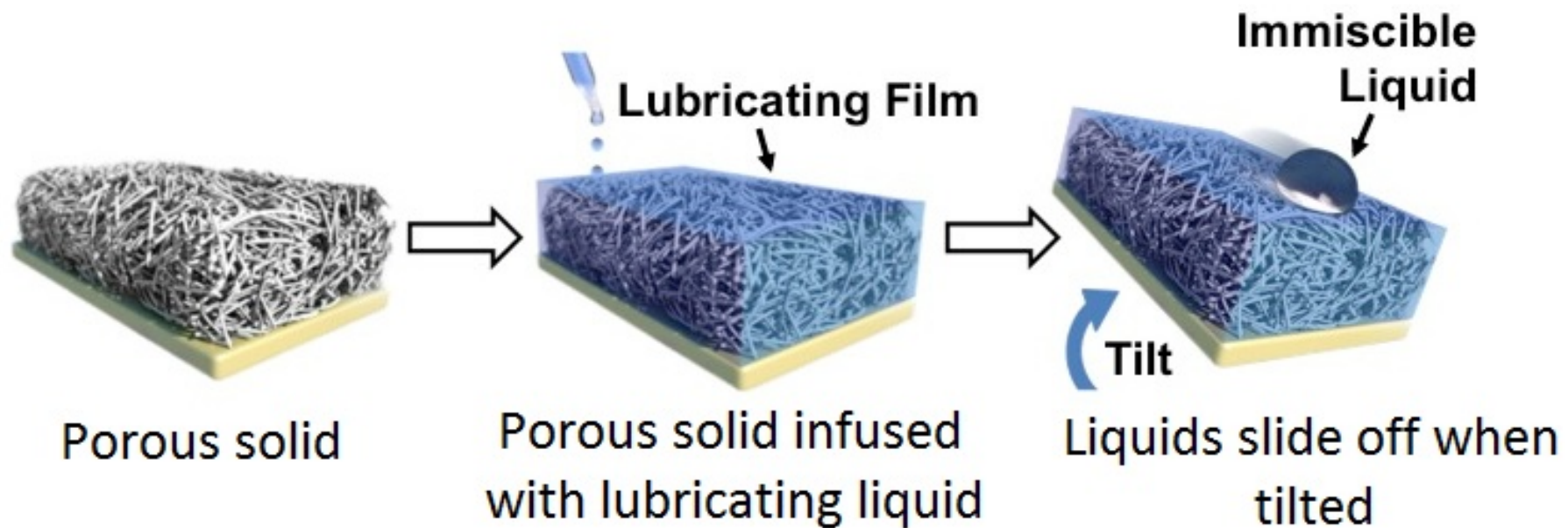
Sindrome del decatleta

Event	100m	Long Jump	Shot Put	High Jump	400m	110m Hurdles	Discus	Pole Vault	Javelin	1500m
Olympic Champion	9.63s	8.31m	21.89m	2.38m	43.94s	12.92s	68.27m	5.97m	84.58m	3:34.08
Decathlon Champion	10.35s	8.03m	14.66m	2.05m	46.90s	13.56s	42.53m	5.20m	61.96m	4:33.59



Perché ora?

Ridondante



A close-up photograph of a tree trunk covered in ivy. The ivy leaves are green and have a characteristic three-lobed shape. The tree bark is visible through the gaps in the leaves. The background is blurred, showing more foliage and light filtering through the trees.

Nanotech sulle spalle dei giganti

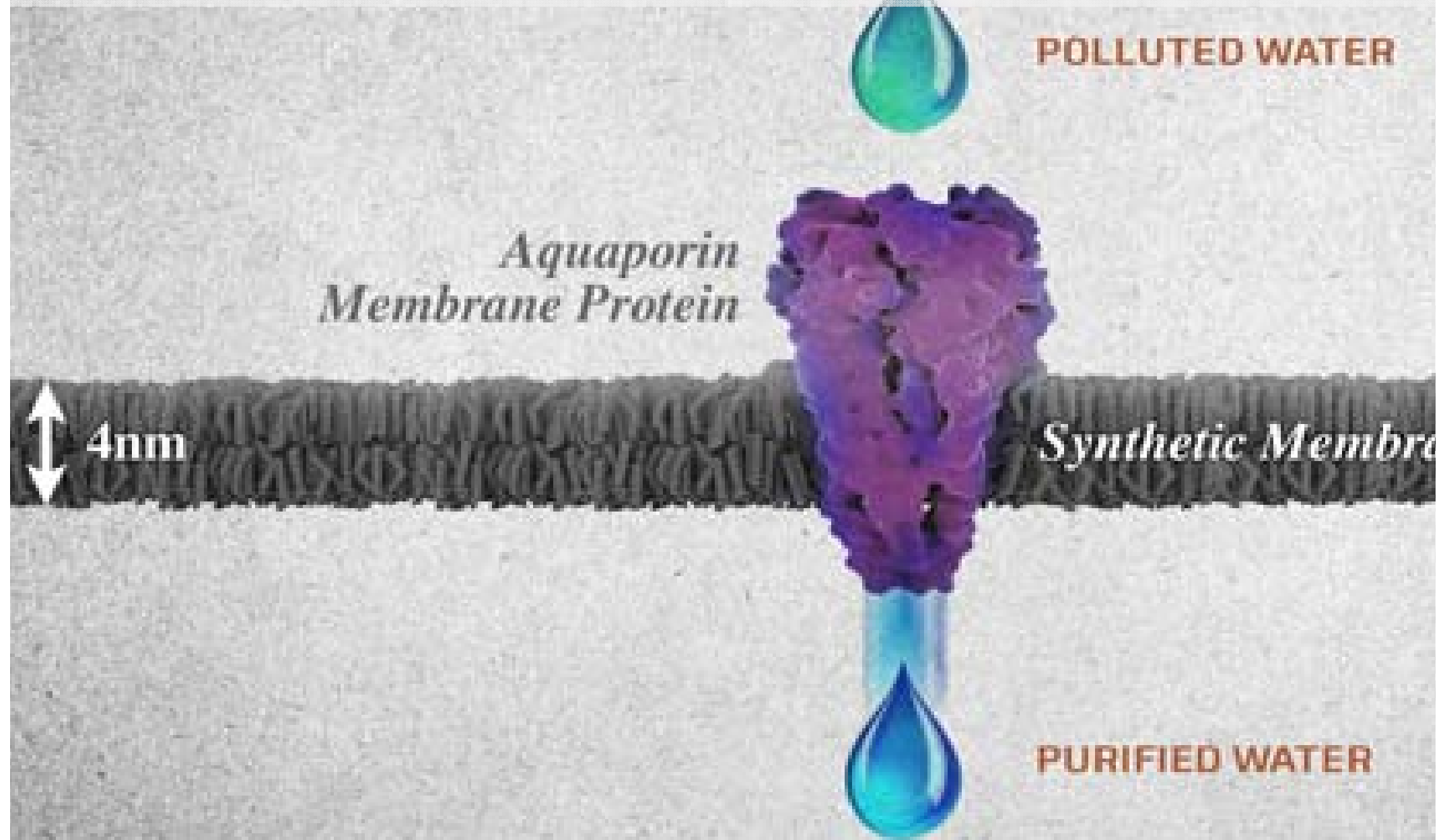


Nanotech sulle spalle dei giganti

A microscopic image showing the root system of a plant, likely a moss or similar small plant. The roots are covered in numerous fine, hair-like structures called rhizoids. The background is a soft, out-of-focus green, suggesting the presence of chlorophyllous tissue.

Perché domani?

(Extra) terrestre



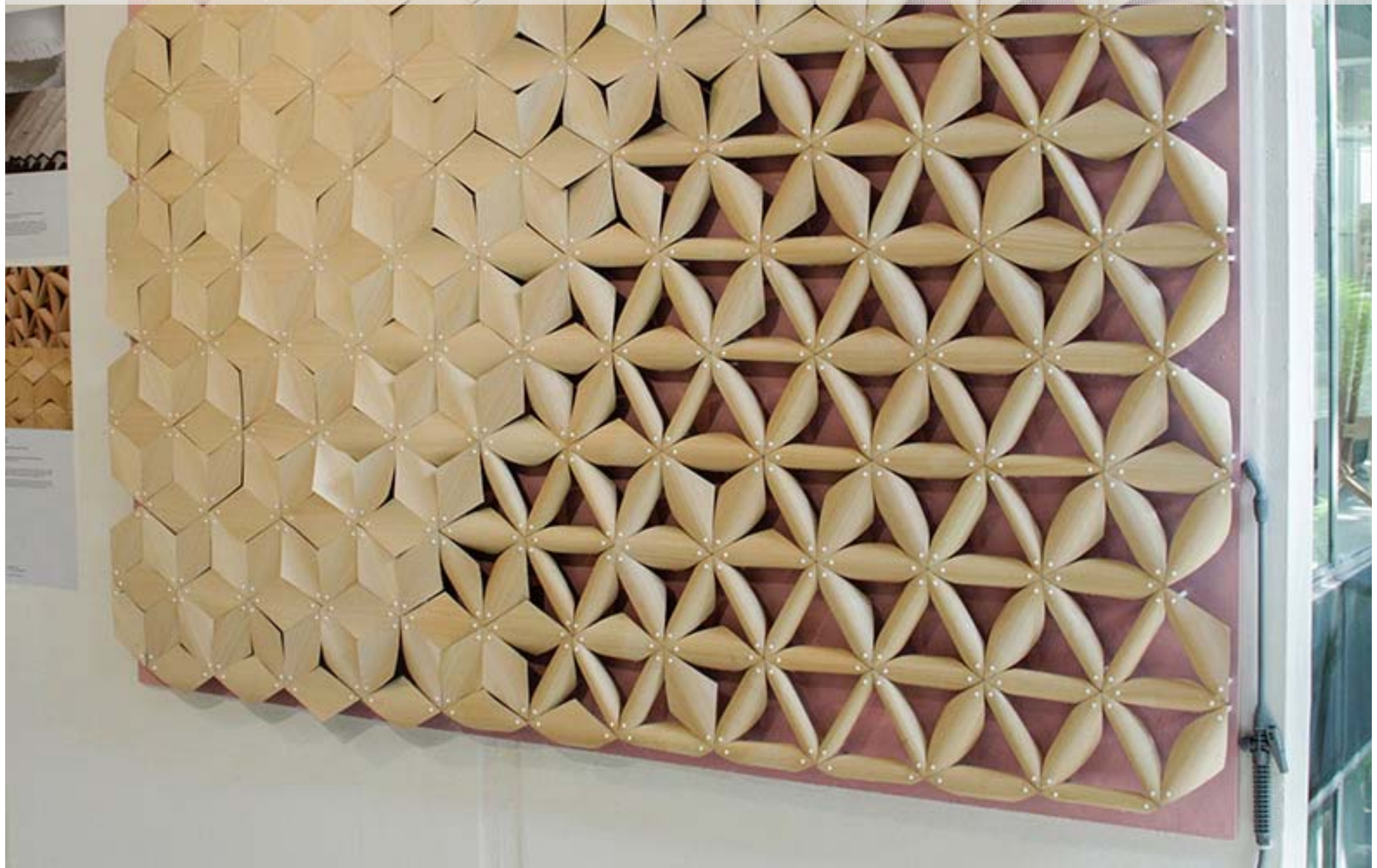


Genius loci, 3.0

Integrata



Plastica



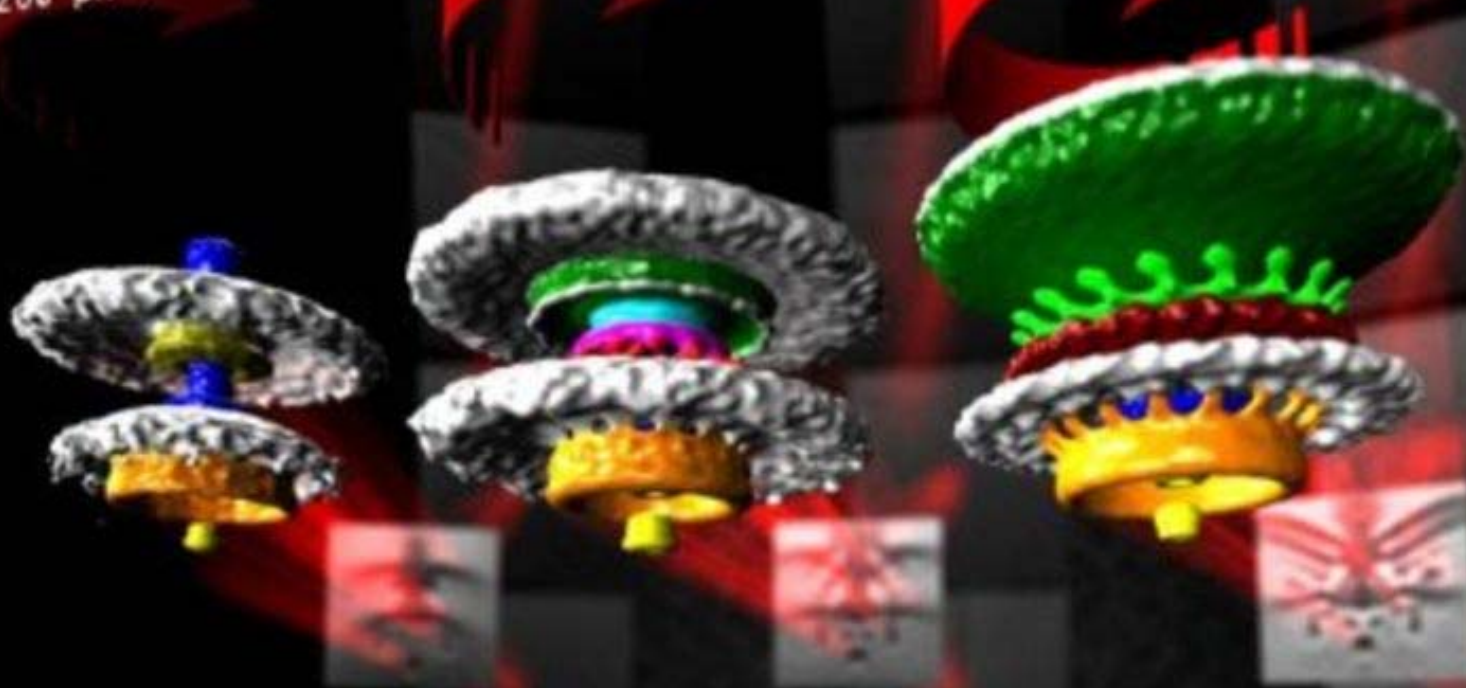
Tecnofilia meets biofilia



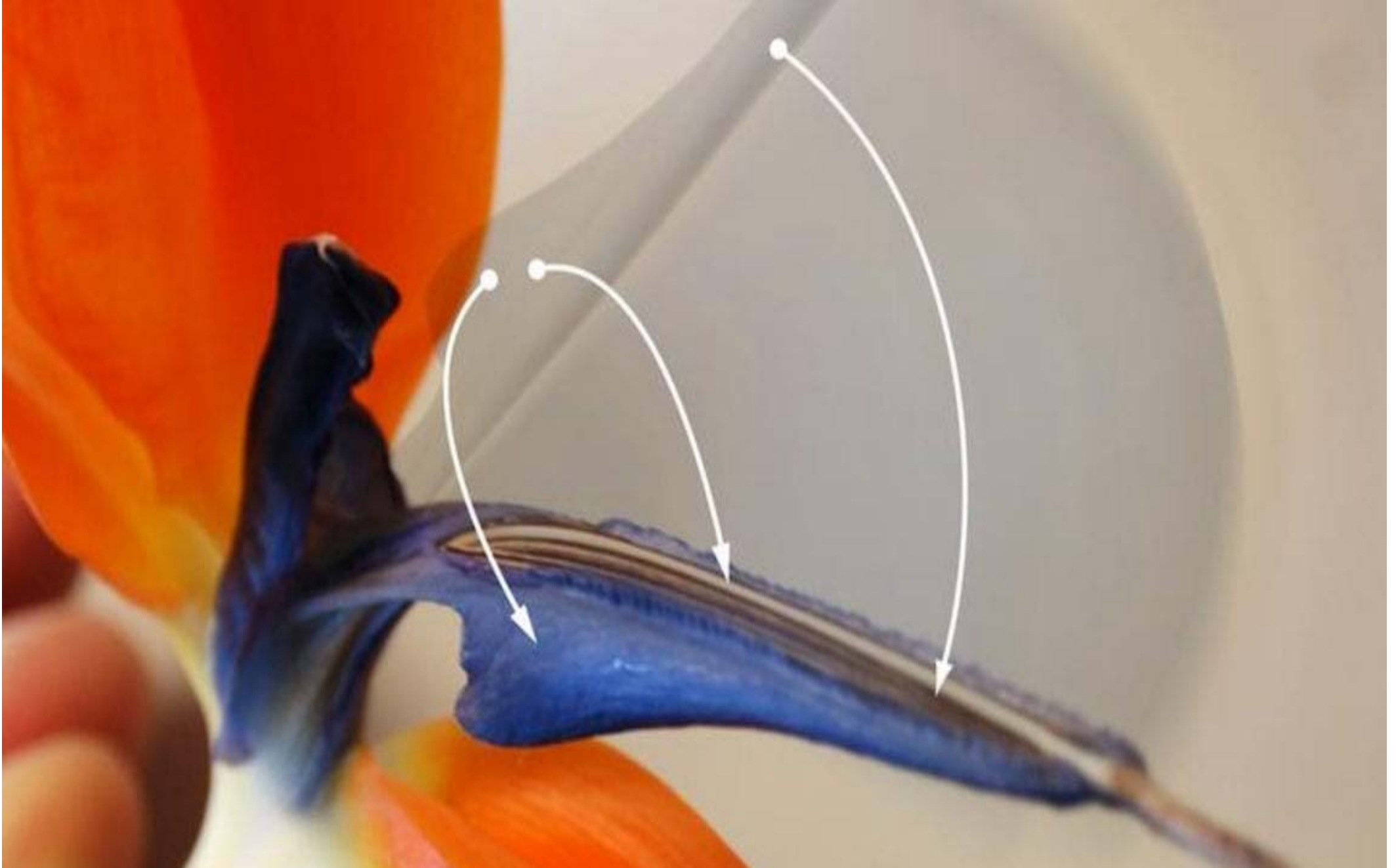
Salmonella
~1260 pN nm

Vibrio
~2200 pN nm

Campylobacter
~3600 pN nm



Modellabile



Everything is a remix



Convergenze evolutive

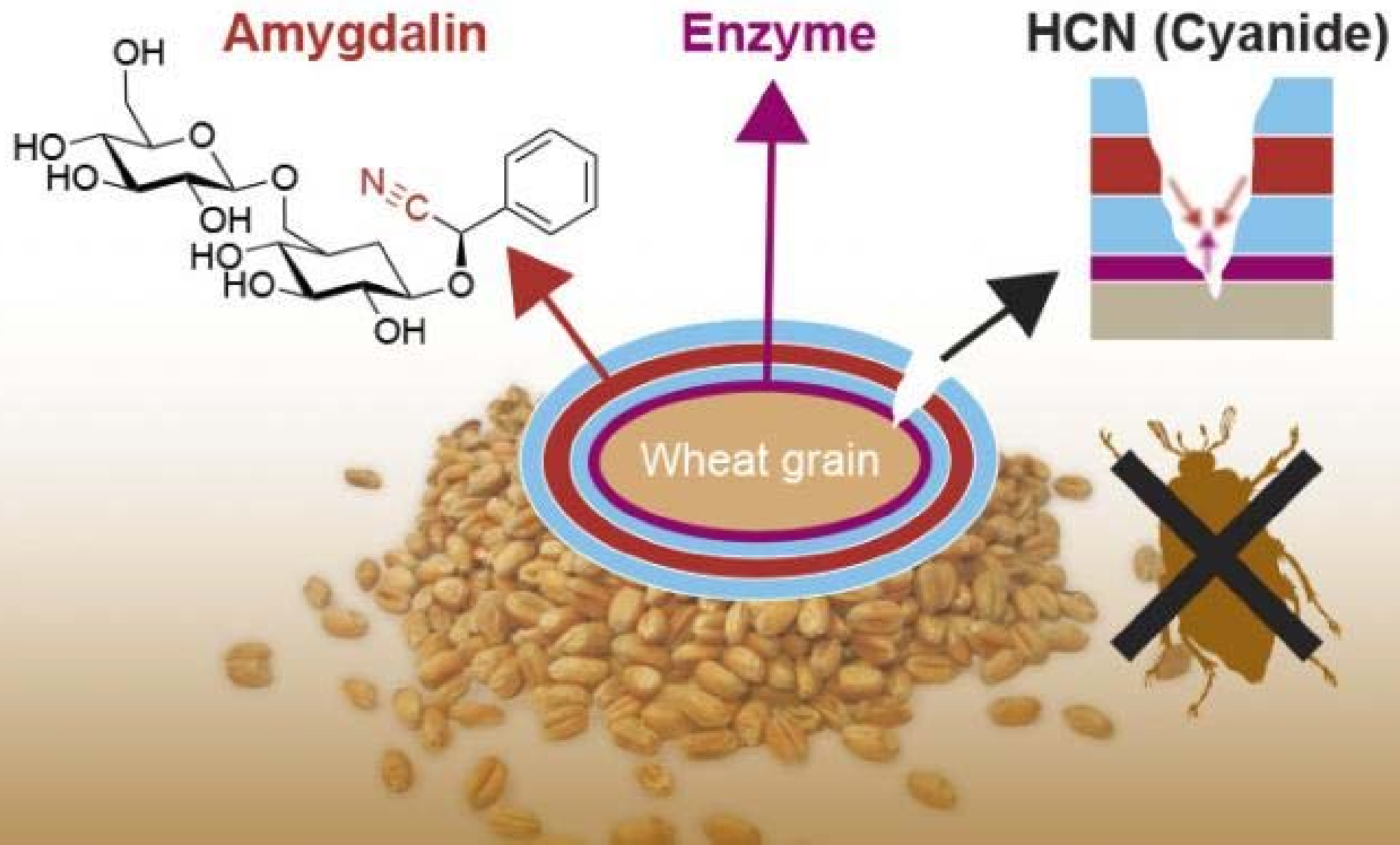


Convergenze evolutive

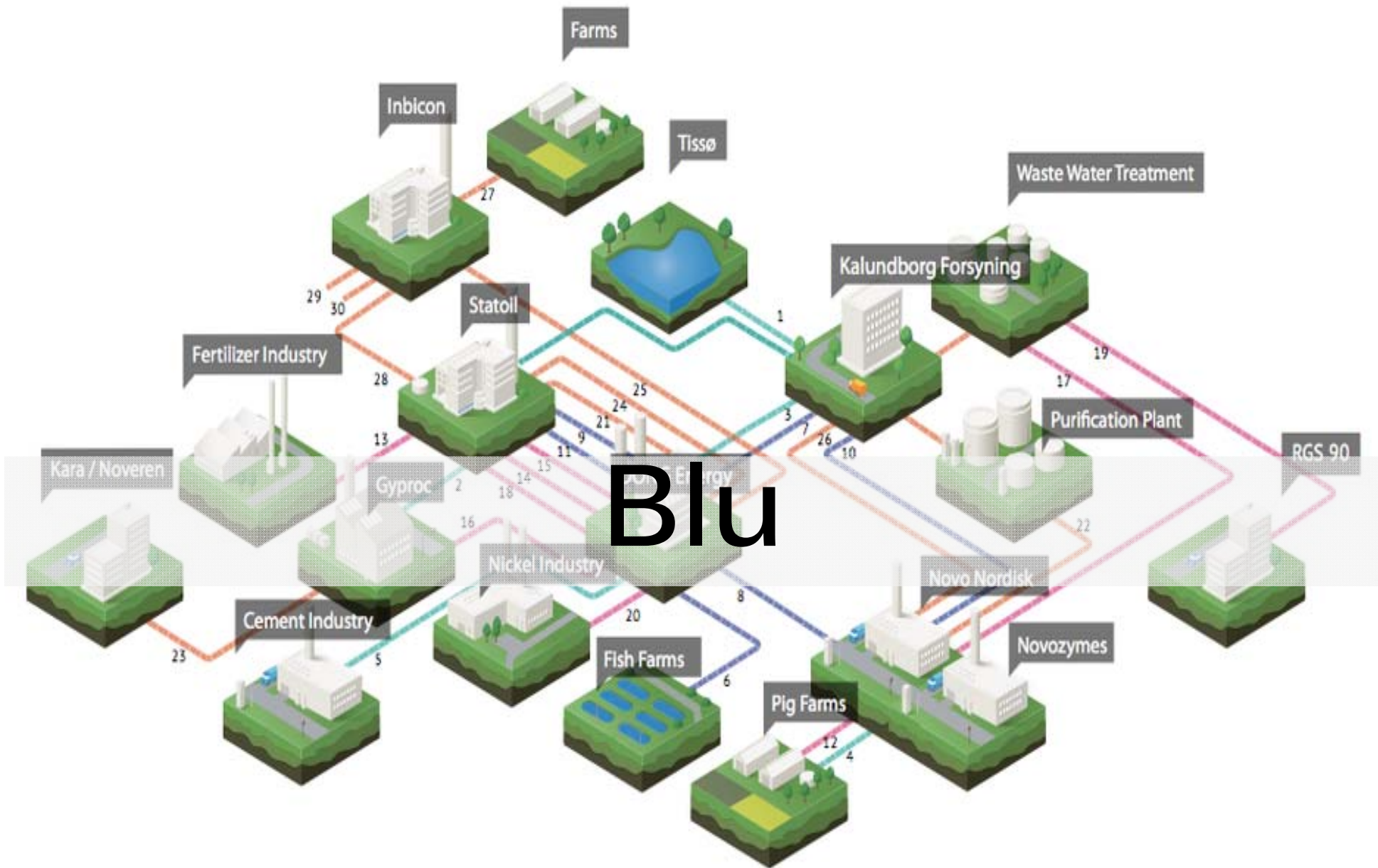


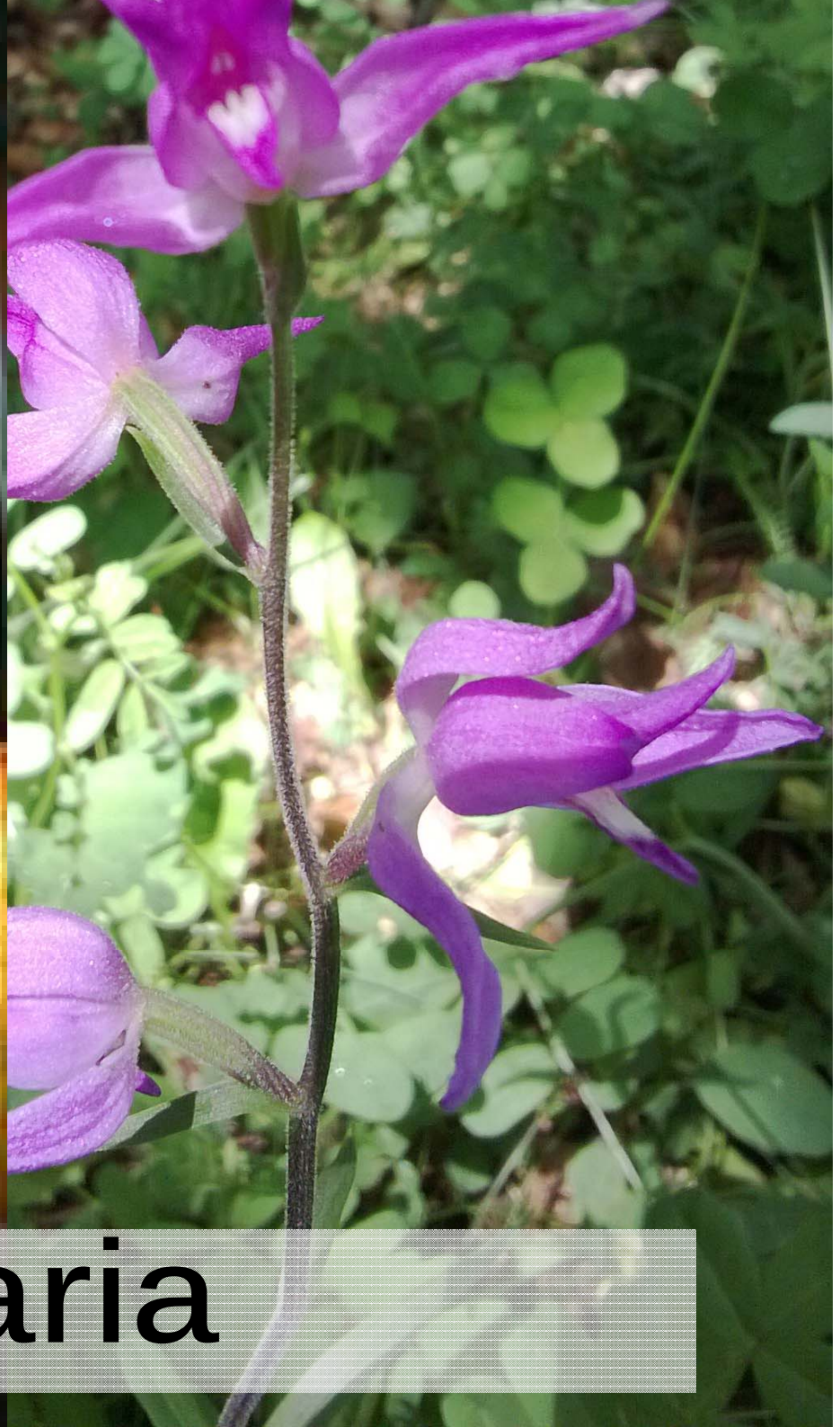
Deus ex machina? Innaturale

Mai definitiva

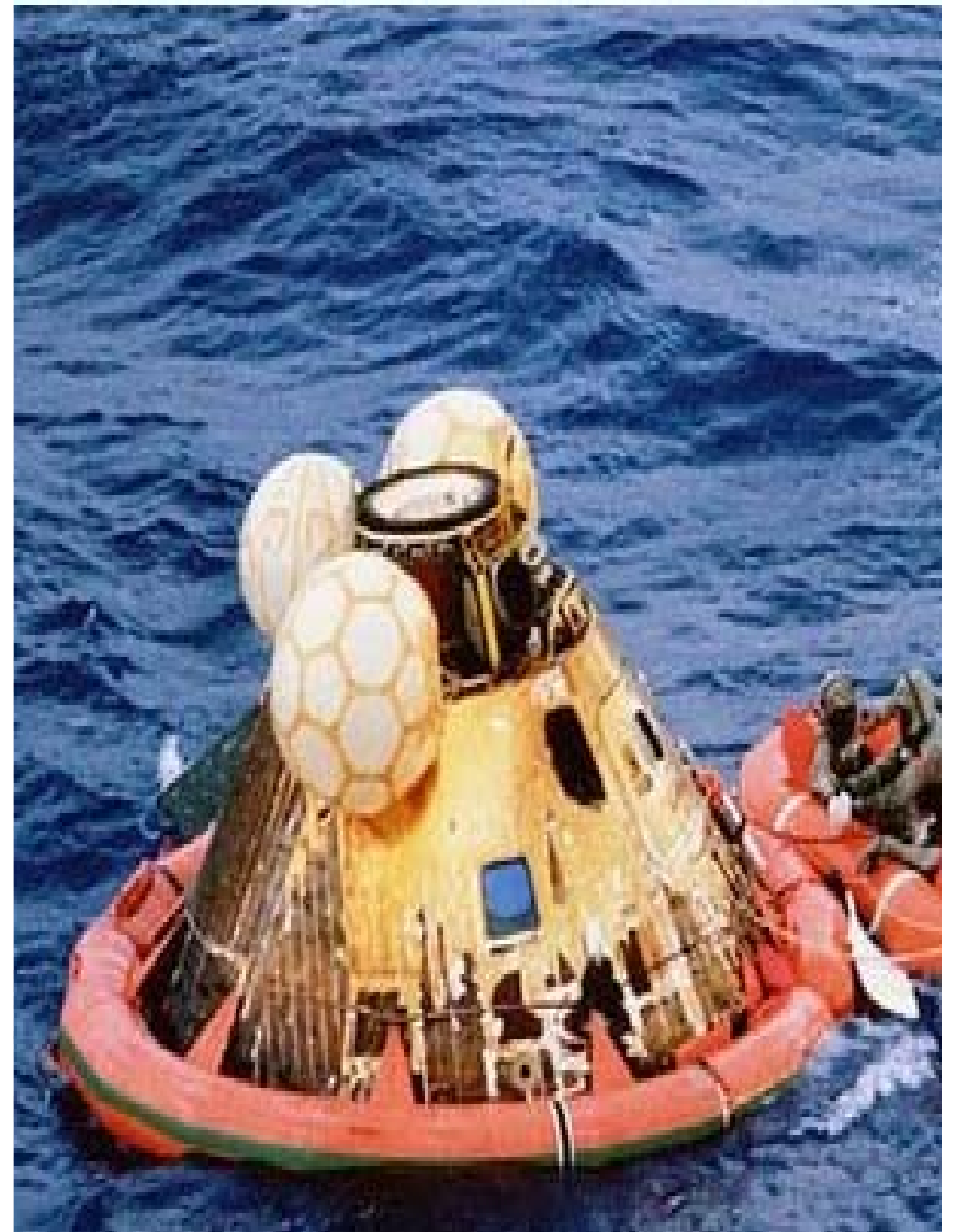


— 2000-2010 —





Ubiquitaria



Trascurata

A close-up photograph of several red ants on a green leaf. The ants are in various positions, some facing the camera and others with their backs to it. The leaf's veins are clearly visible.

Supporting a new design paradigm

Leonardo DiCaprio Foundation and the Ray C. Anderson Foundation announce funding for biomimicry initiatives.

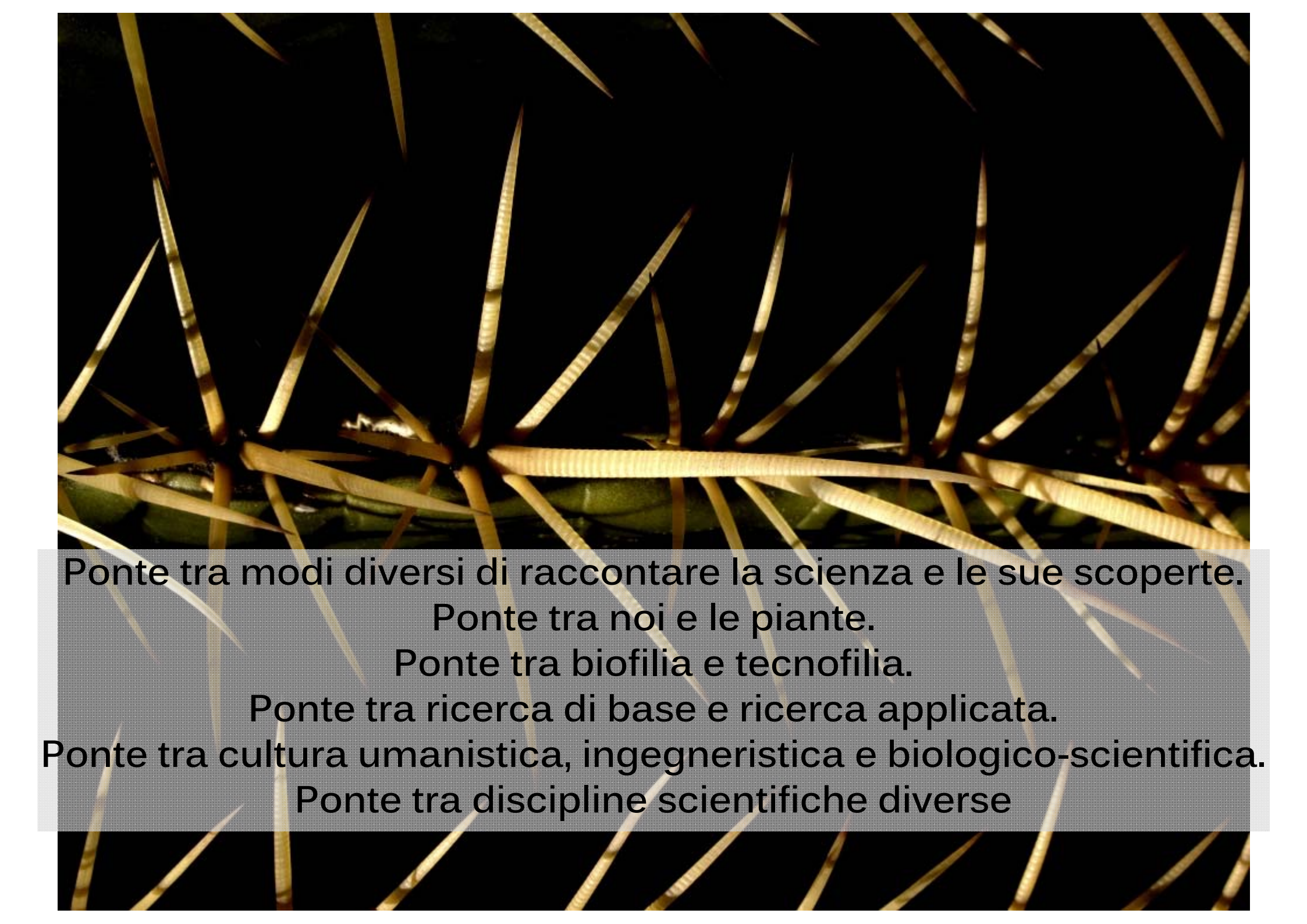
Intelligent design!

LEARN MORE



Nani sulle spalle dell'evoluzione





Ponte tra modi diversi di raccontare la scienza e le sue scoperte.

Ponte tra noi e le piante.

Ponte tra biofilia e tecnofilia.

Ponte tra ricerca di base e ricerca applicata.

Ponte tra cultura umanistica, ingegneristica e biologico-scientifica.

Ponte tra discipline scientifiche diverse



“L’utile per scopo, il vero per oggetto, l’interessante per mezzo”