sanctify the Lord
nd always be rea
to everyone wh
reason for the hope tha
ness and fear,

# rforh*

reasonsforhope

ALOHA!

BUCKHOLDER
ARCHERY

UNIVERSITY of HAWAI'I®

MĀNOA

MOODY
Bible Institute™

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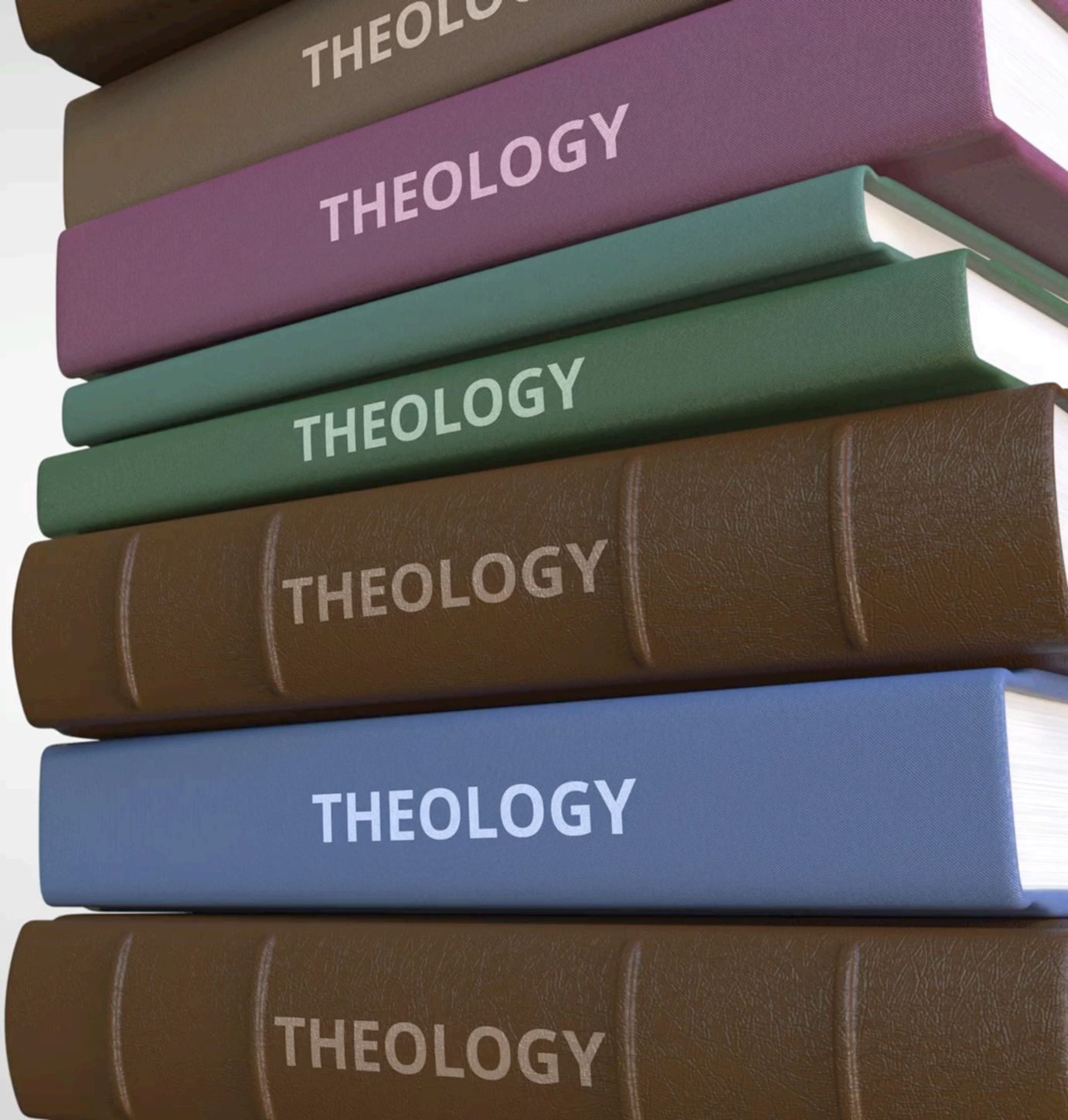
UNIVERSITY

DALLAS
THEOLOGICAL
SEMINARY


THEOLOGY
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THEOLOGY

# Notes are all available on the app

reasonsforhope*

Biomimicry...
copying the Creator
reasonsforhope*
Frank L. Figueroa Jr.

IN THE BEGINNING
GOD
GENESIS 1:1

# Copy

A thing made to be similar or identical to another.
To reproduce or imitate an original.

Oxford Dictionary

# IS CHRISTIANITY A COPYCAT RELIGION?

ZEITGEIST
ADDENDUM
Winner

OF COURSE

NOT!

ECCE AG

**And do not be conformed to this world, but be transformed by the renewing of your mind, that you may prove what is that good and acceptable and perfect will of God.**

***Romans 12:2***

# Conformed = συσχηματίζω

suschematizo {soos-khay-mat-id´-zo}

- To fashion alike. To make something like something by following a pattern.

# Transformed = μεταμορφόω

metamorphoo {met-am-or-fo´-o}

- To transform. To metamorphose. To change or transfigure.

19

# "JESUS IS A COPYCAT GOD"

DeBunked

BECOME A DEBUNKED

# DEFENDER

TEXT

## Adios Frank to 51555

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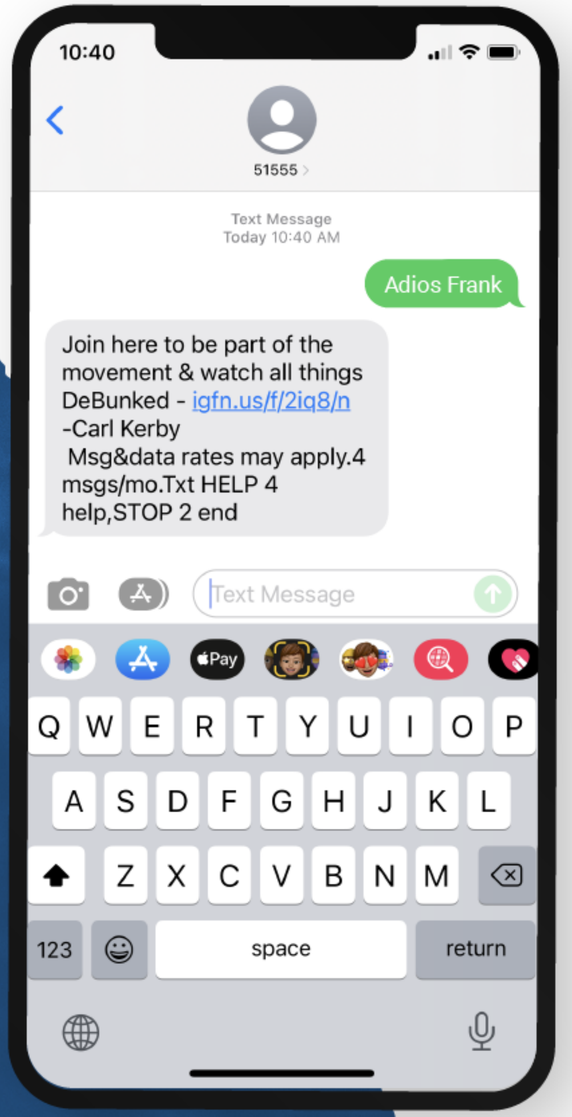

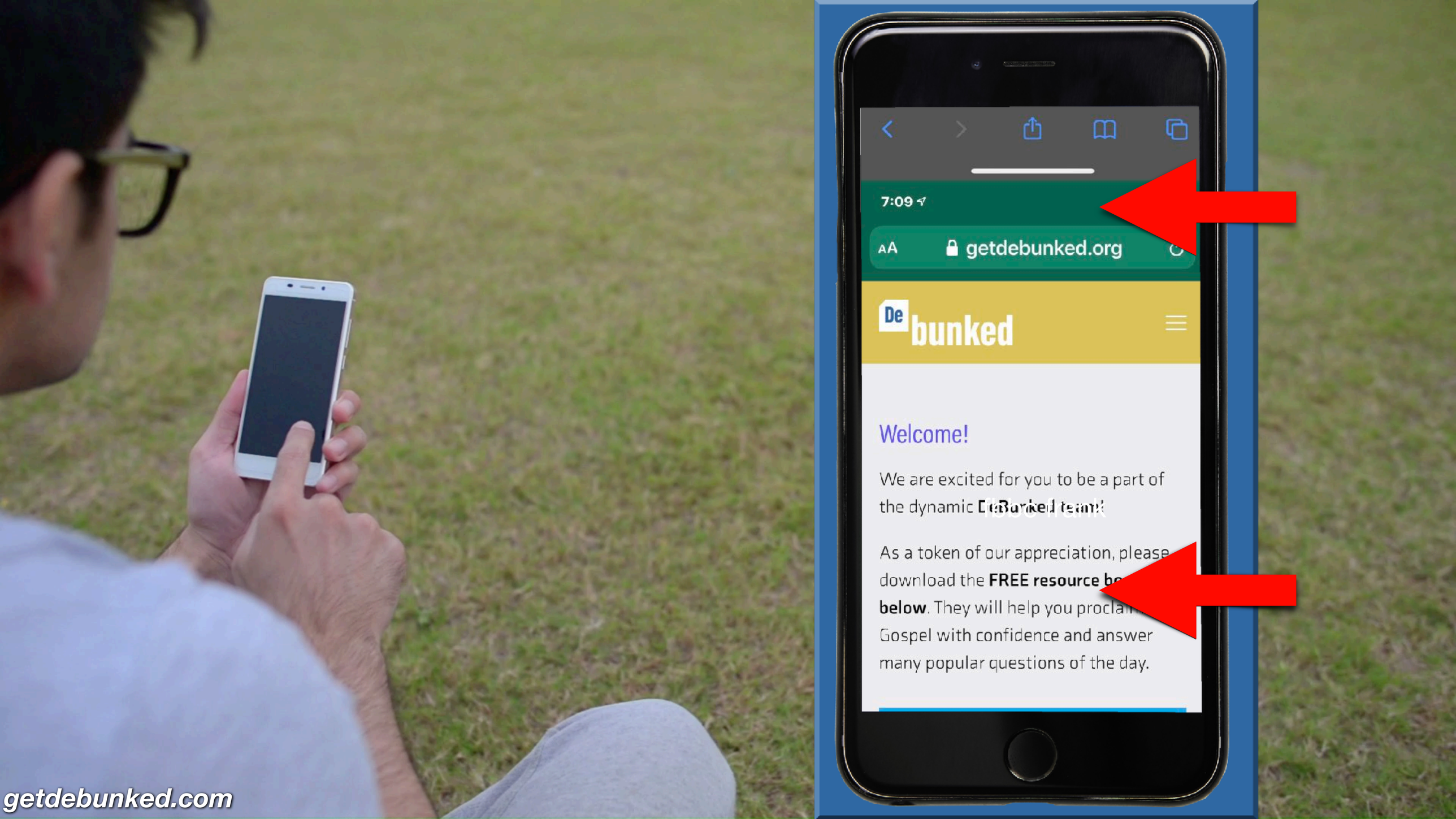
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As a token of our appreciation, please
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Gospel with confidence and answer
many popular questions of the day.
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Biomimicry...
copying the Creator
reasonsforhope*
Frank L. Figueroa Jr.

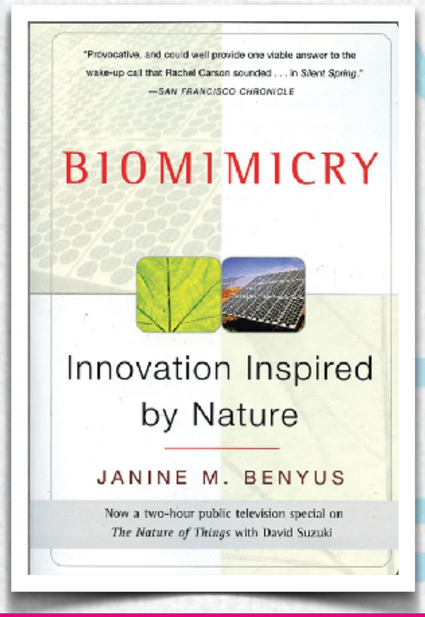
For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,

***Romans 1:20***

# Biomimetics/Biomimicry

The design and production of materials, structures, and systems that are modeled on biological entities and processes.

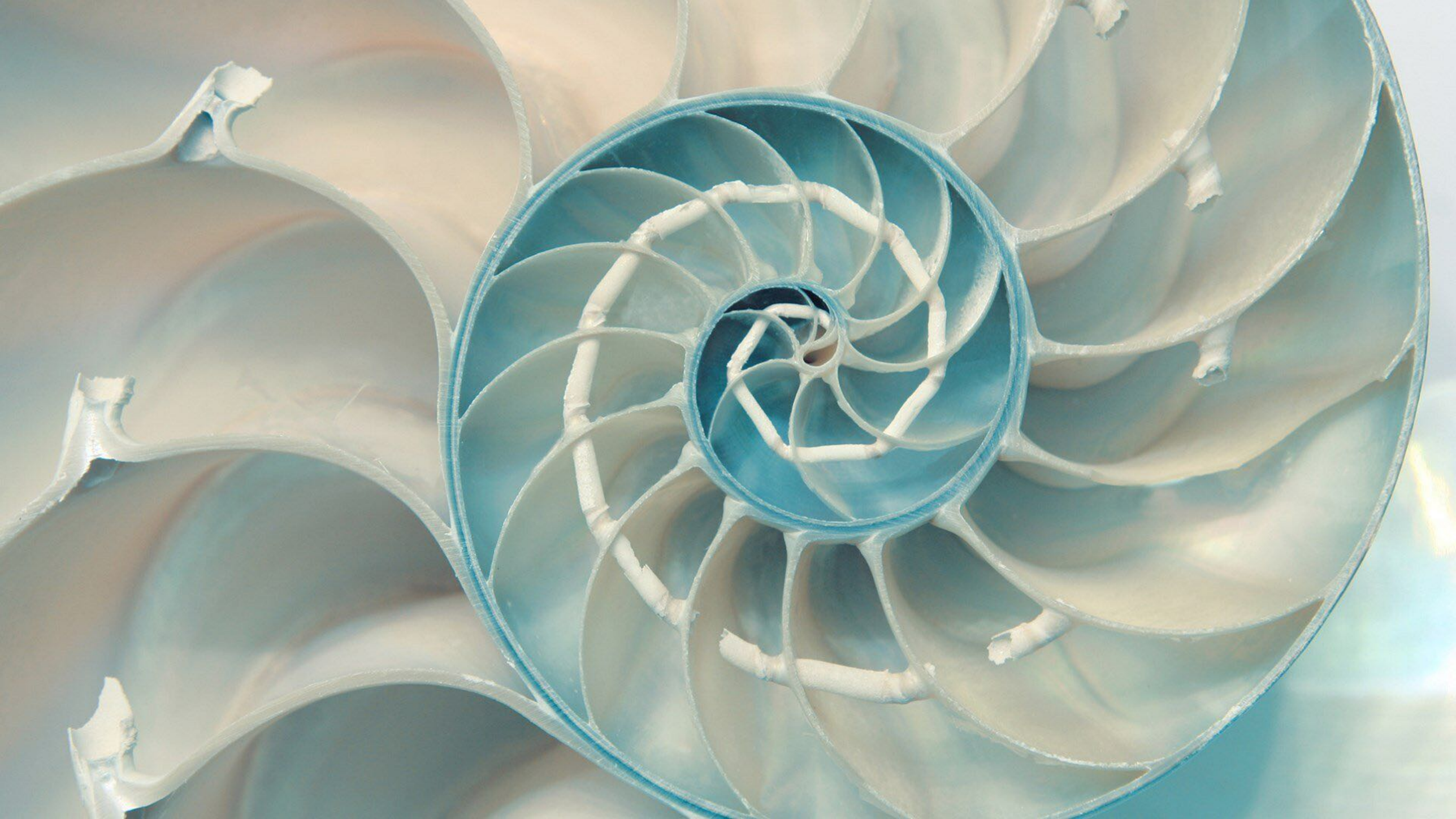
Oxford Dictionary




## Pioneer in the field of Biomimetics

# Janine Benyus

***Coined the term Biomimicry to describe intentional problem-solving design inspired by nature.***



**In the beginning God created the heavens and the earth.**

***Genesis 1:1***

# Created = בָּרָא

bara’ {baw-raw}

- To create absolutely. To make something out of nothing.

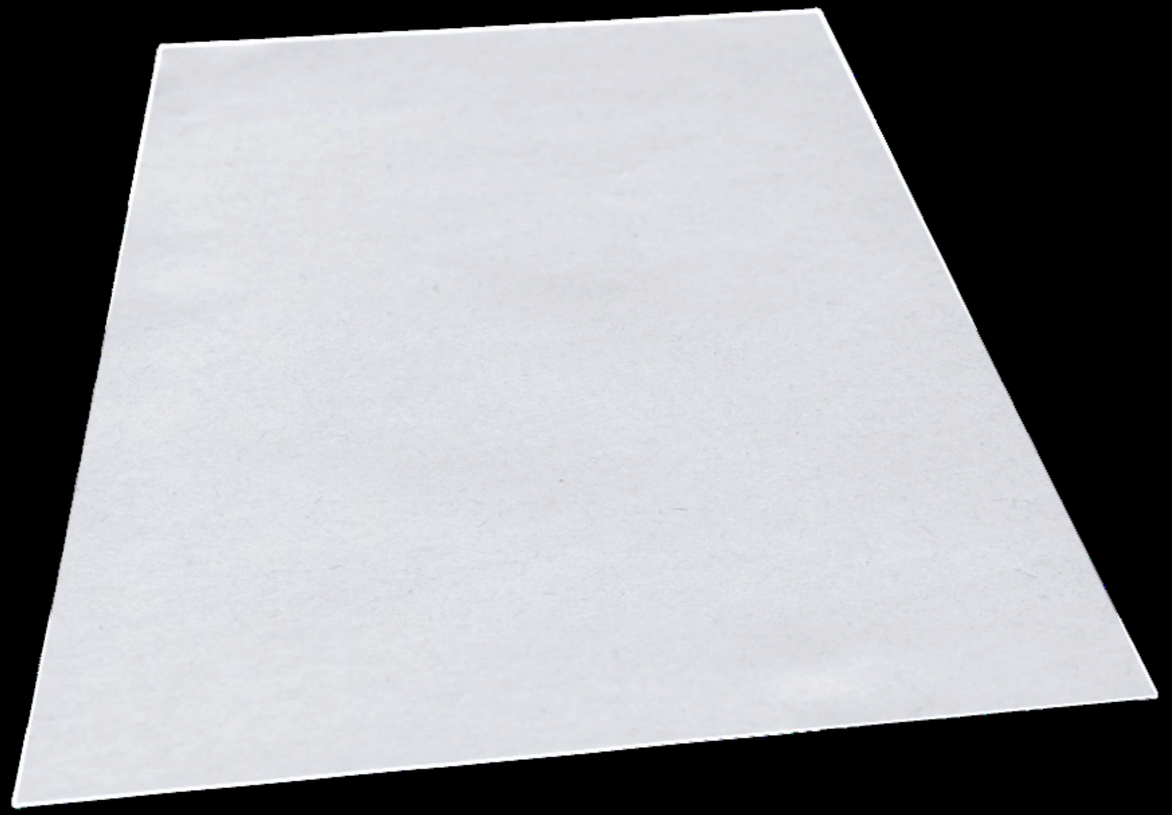
**And the LORD God said, “It is not good that man should be alone; I will <u>make</u> him a helper comparable to him.”**

***<u>Genesis 2:18</u>***

# Make = עָשָׂה

‘asah {aw-saw}

- To do work and make something. To fashion something from something.



Then God said, “Let the waters abound with an abundance of living creatures, and let birds fly above the earth across the face of the firmament of the heavens.” So God created great sea creatures and every living thing that moves, with which the waters abounded, according to their kind, and every winged bird according to its kind.

***Genesis 1:20-26***

**… And God saw that it was good. And God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth." So the evening and the morning were the fifth day. Then God said, "Let the earth bring forth the living creature according to its kind:…**

***Genesis 1:20-26 cont…***

…cattle and creeping thing and beast of the earth, each according to its kind”; and it was so.  And God made the beast of the earth according to its kind, cattle according to its kind, and everything that creeps on the earth according to its kind. And God saw that it was good.

***Genesis 1:20-26 cont…***

**“Listen to this, O Job; Stand still and consider the wondrous works of God. Do you know when God dispatches them, and causes the light of His cloud to shine? Do you know how the clouds are balanced, those wondrous works of Him who is perfect in knowledge?**

***Job 37:14-16***

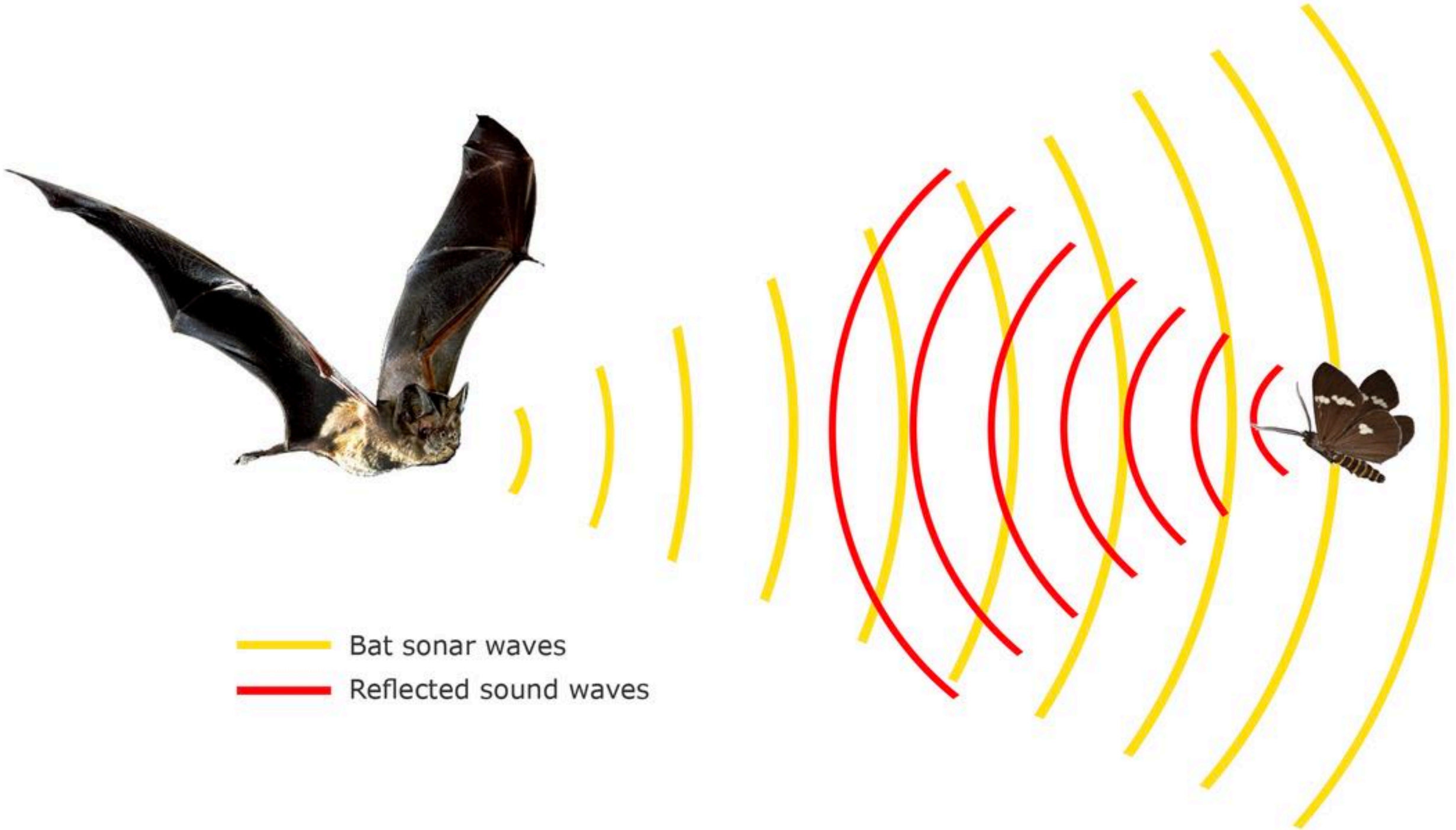
**“But now ask the beasts, and they will teach you;  And the birds of the air, and they will tell you;  Or speak to the earth, and it will teach you;  And the fish of the sea will explain to you.  Who among all these does not know that the hand of the LORD has done this, in whose hand is the life of every living thing, and the breath of all mankind?**

***Job 12:7-10***

**O LORD, how manifold are Your works! In wisdom You have made them all. The earth is full of Your possessions - This great and wide sea, in which are innumerable teeming things, living things both small and great.**

***Psalm 104:24-25***

Bats


Bat sonar waves
Reflected sound waves

AUTOTUNE
ANT 1 MAIN
IR1
MAP
X-BAND
TRUE TRAIL
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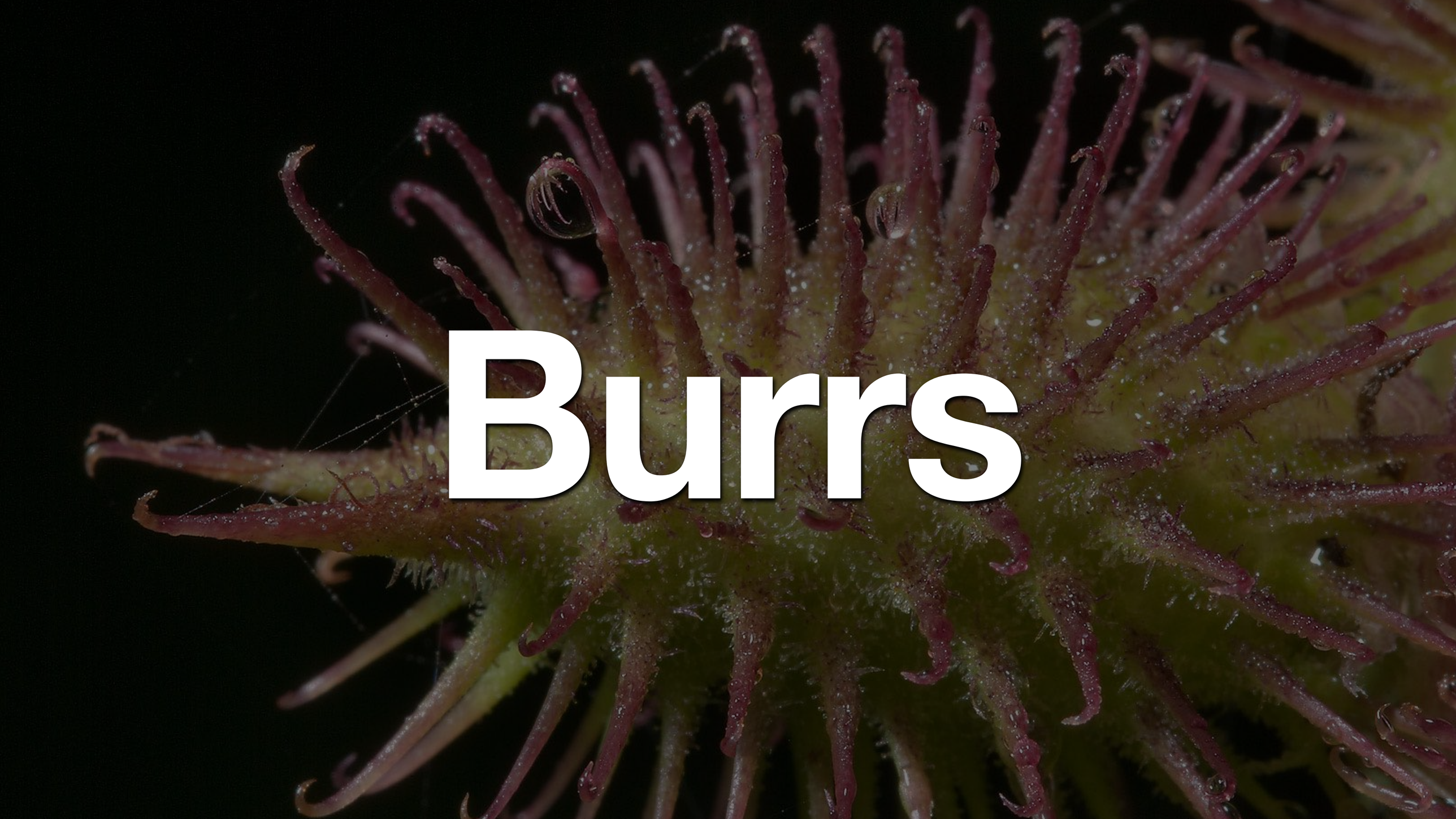
>184.2°T<
VRM
>8.30NM<
WTC
20-JAN-2018- 04:20


Burrs

Eggseed
Eggseed
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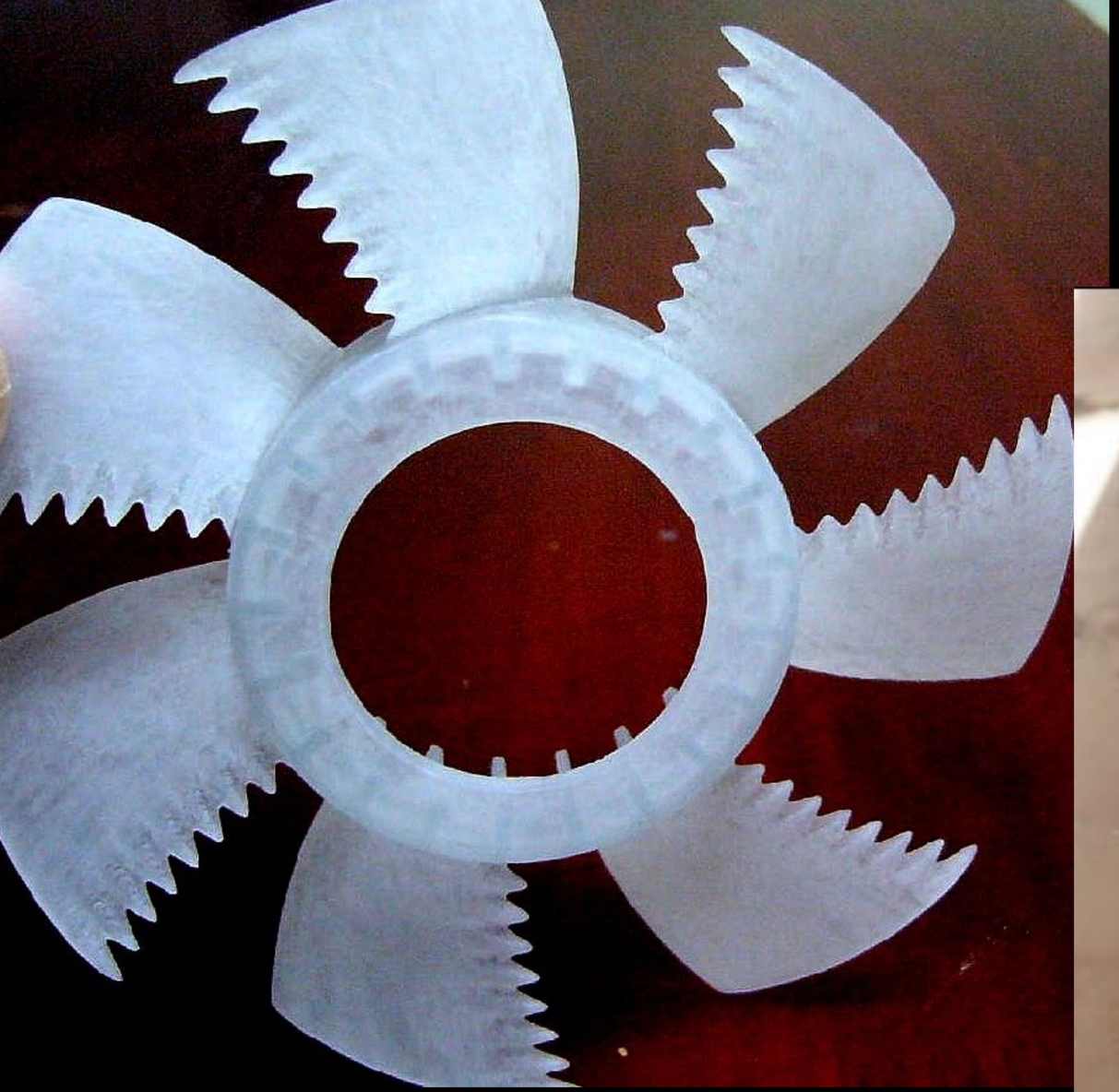
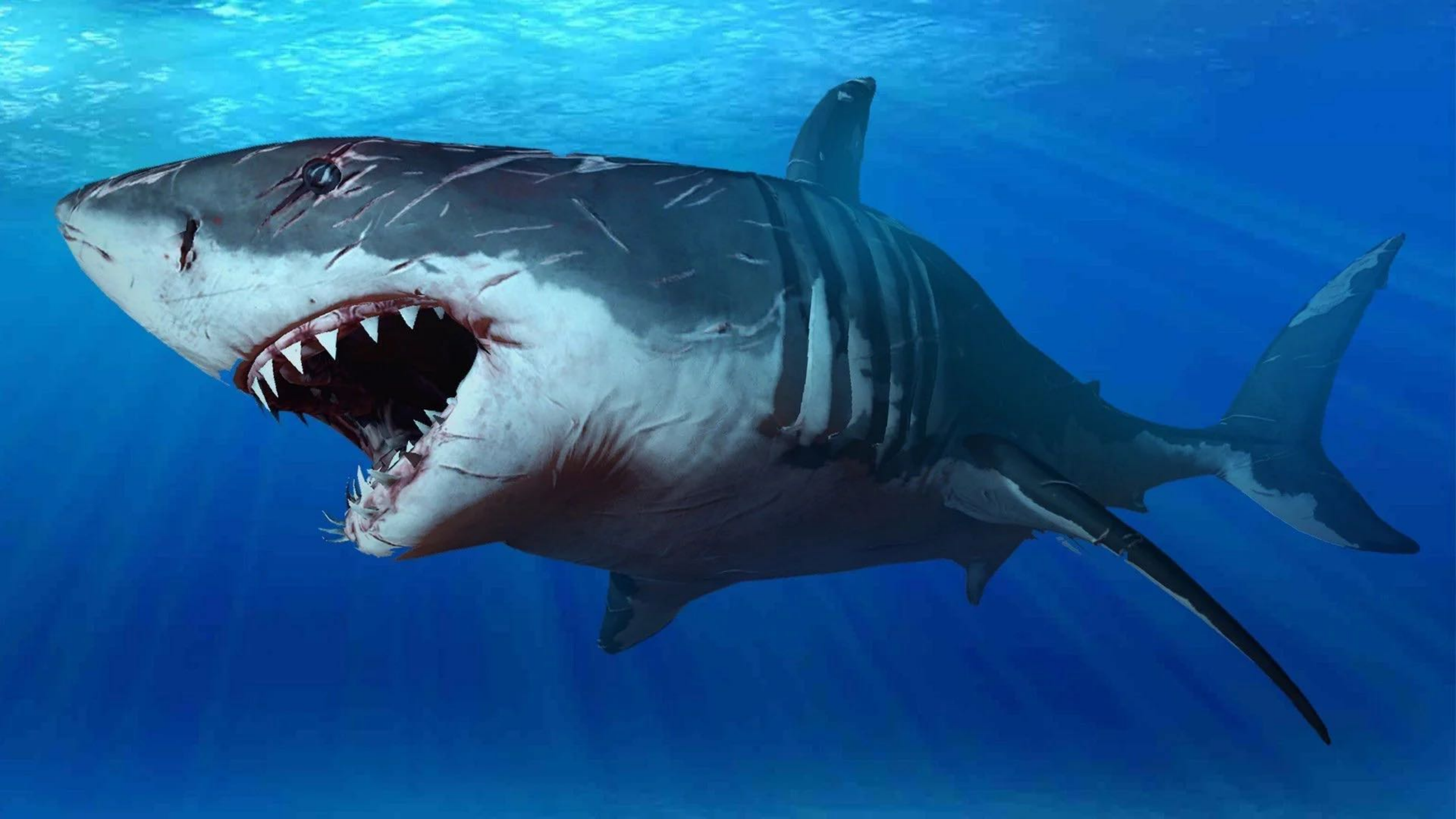
Eggseed

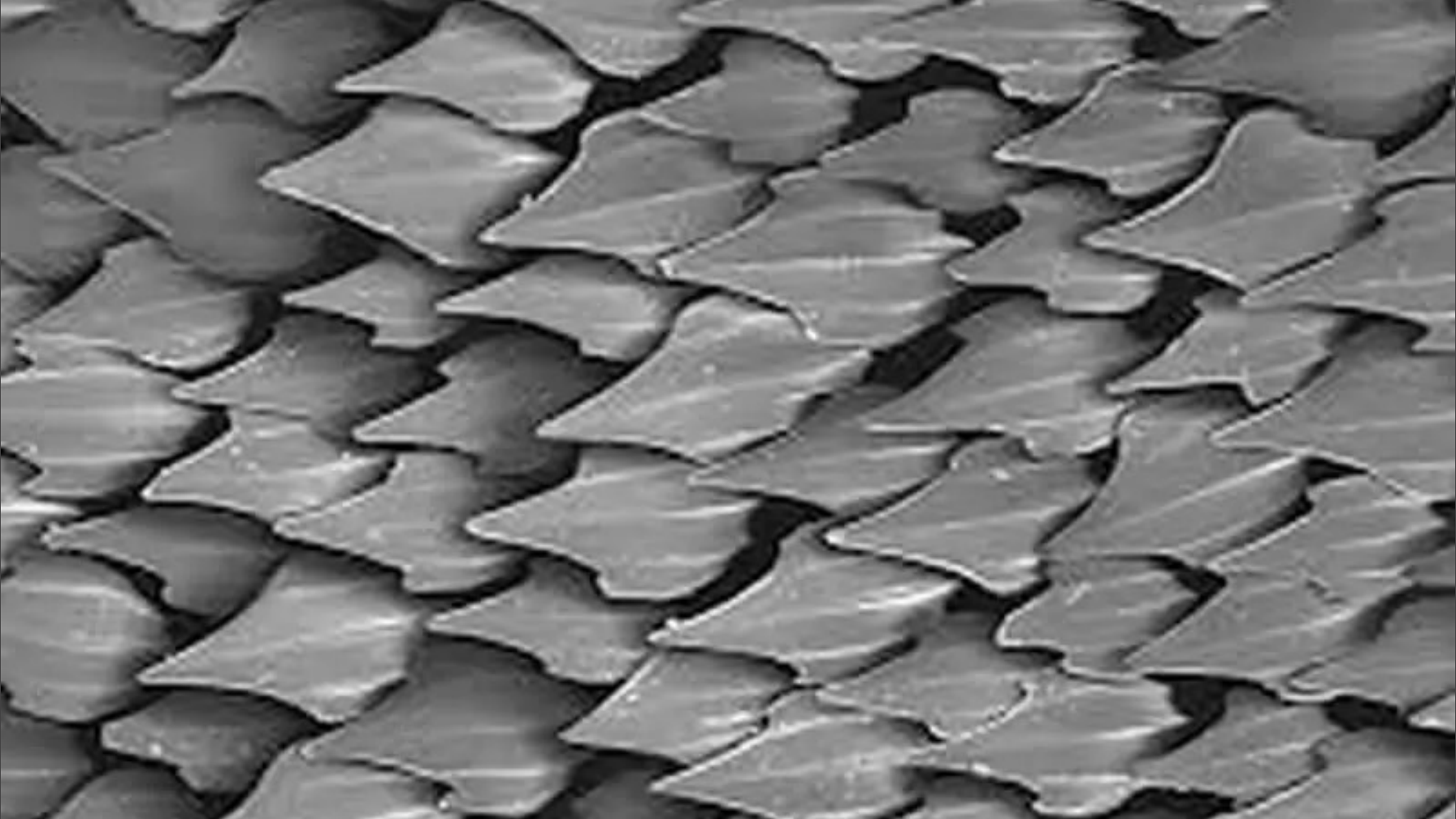
Whales



Plank earth fin Co.

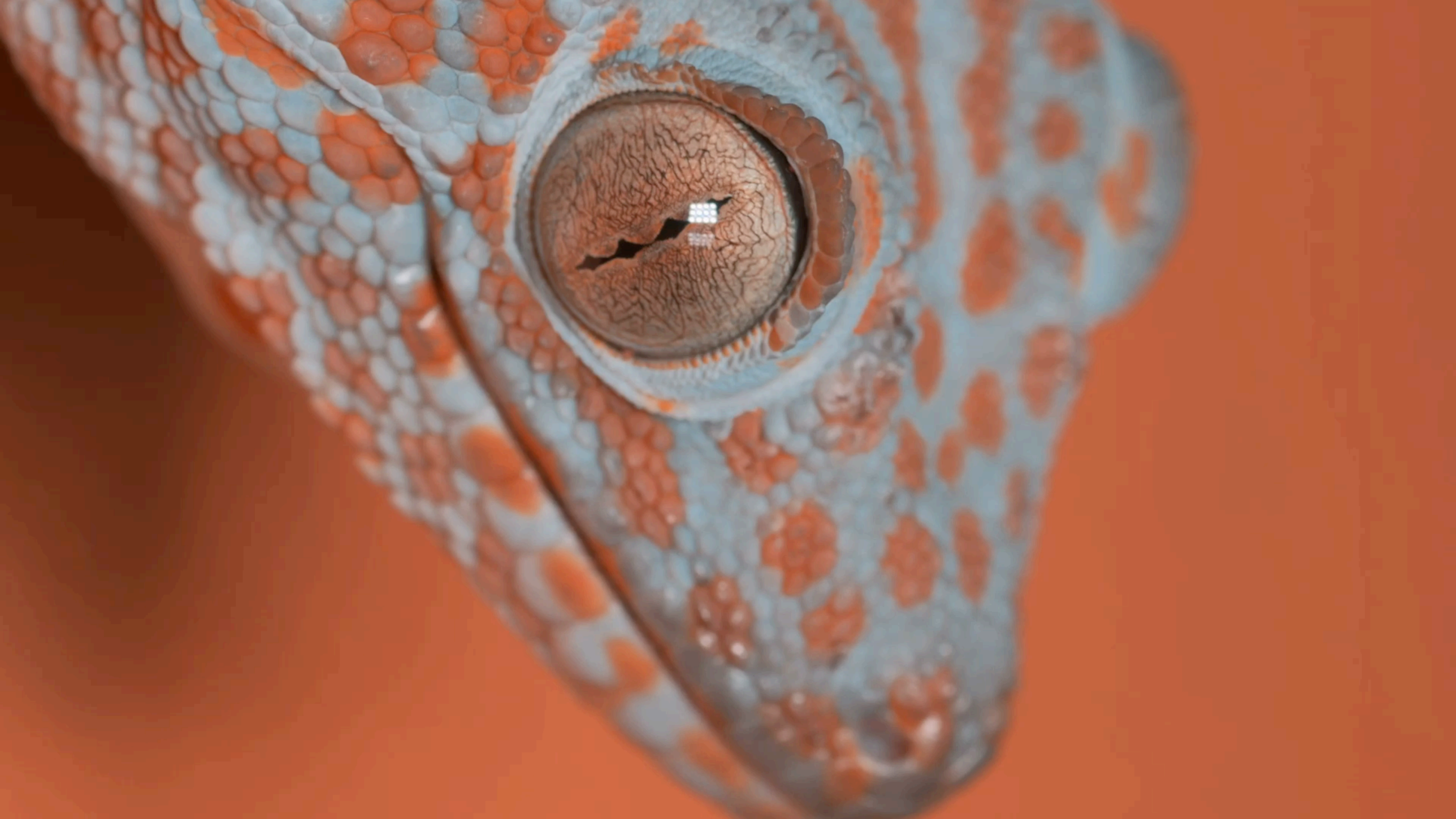
Sharks



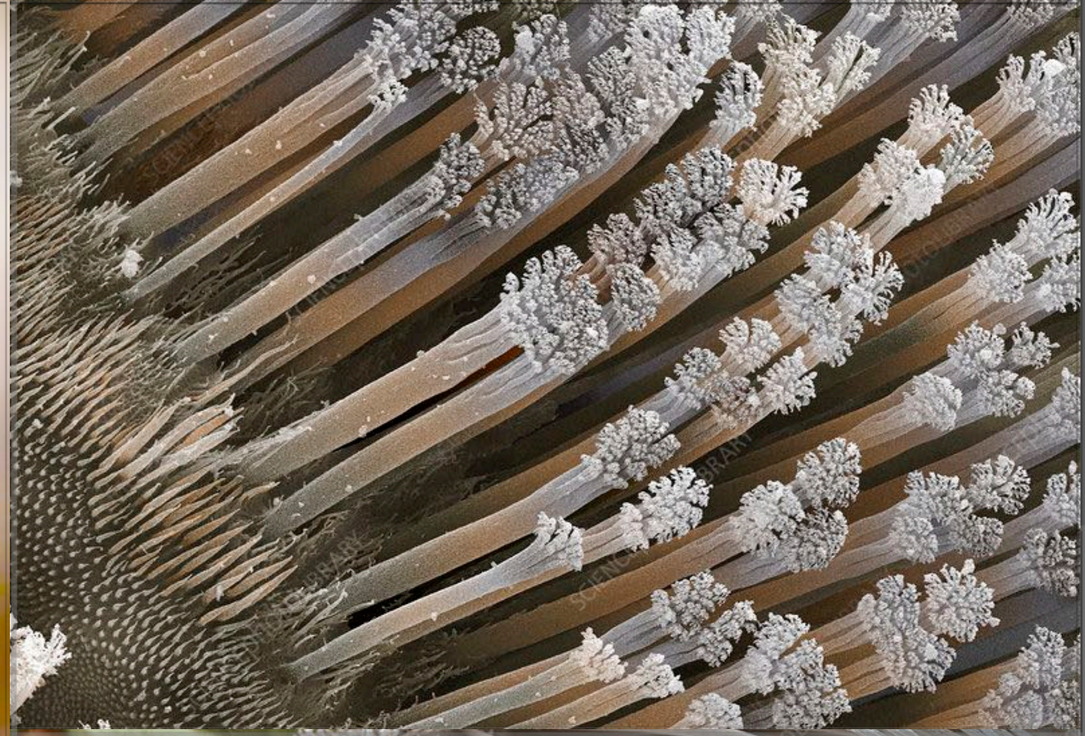


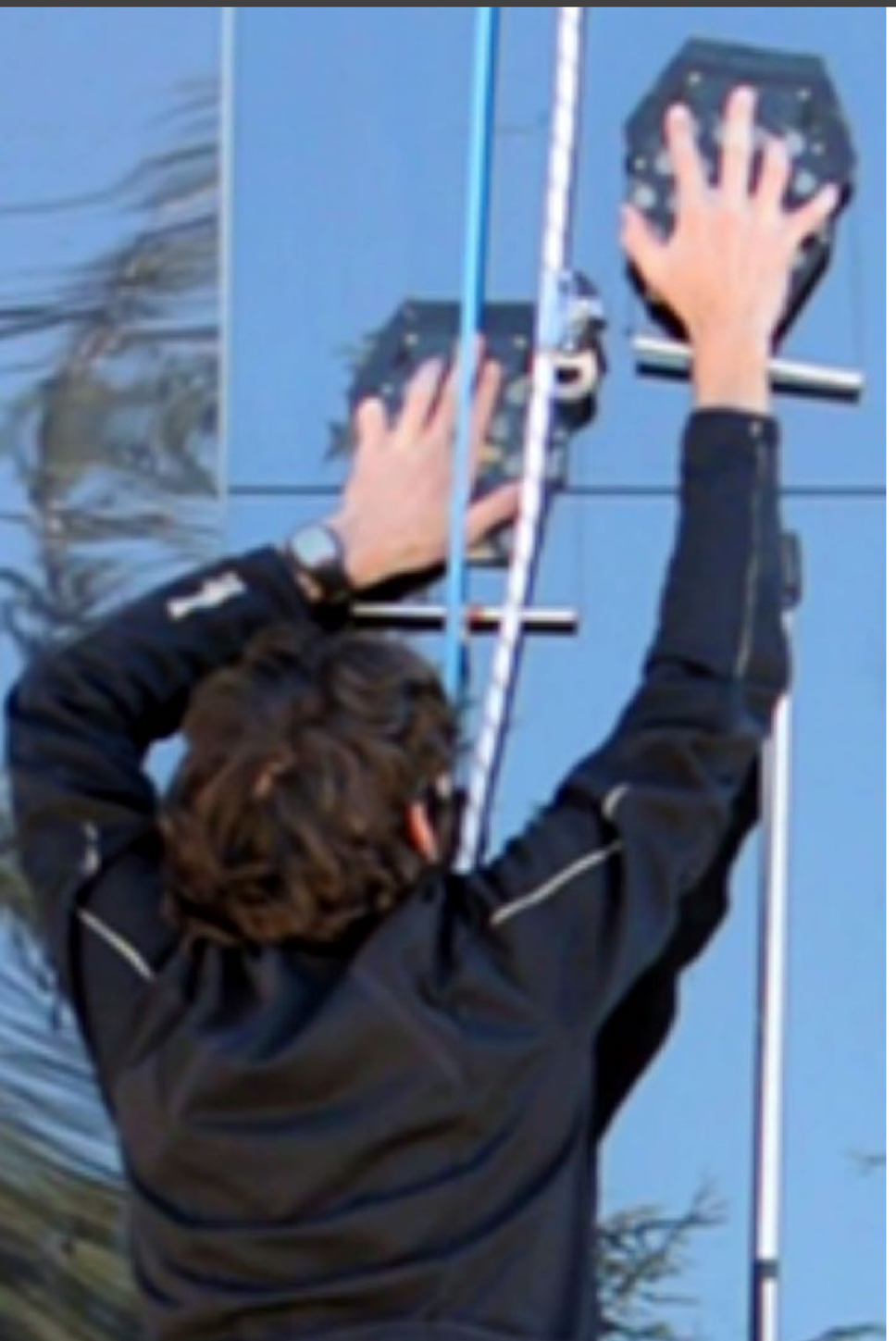
USA
USA
PHELPS

Geckos



GEICO®



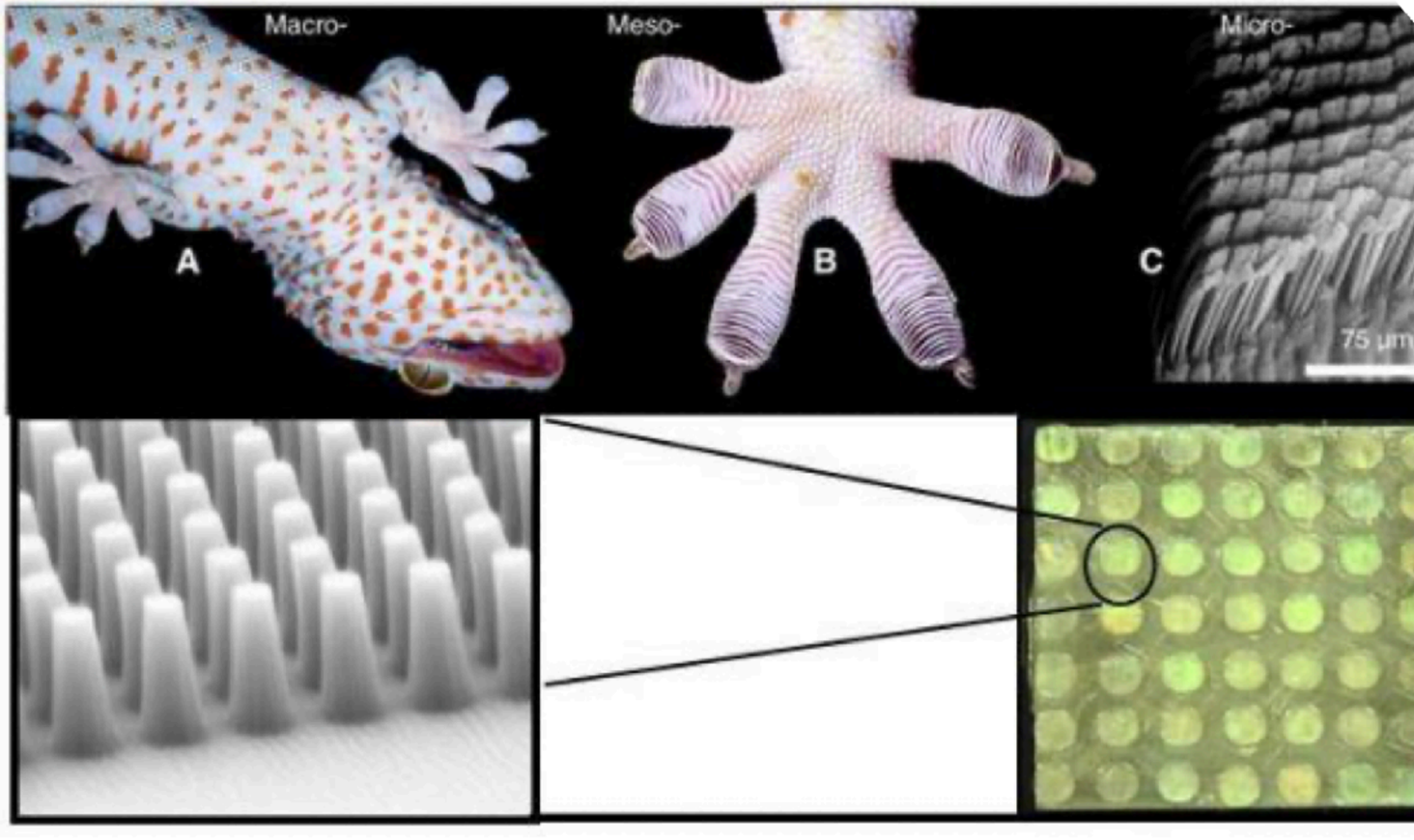


# Gecko-Inspired DARPA Technology Helps Humans Scale Walls

BY SAN

JUN 06,

DARPA's Z-Man program lets humans scale walls like geckos.

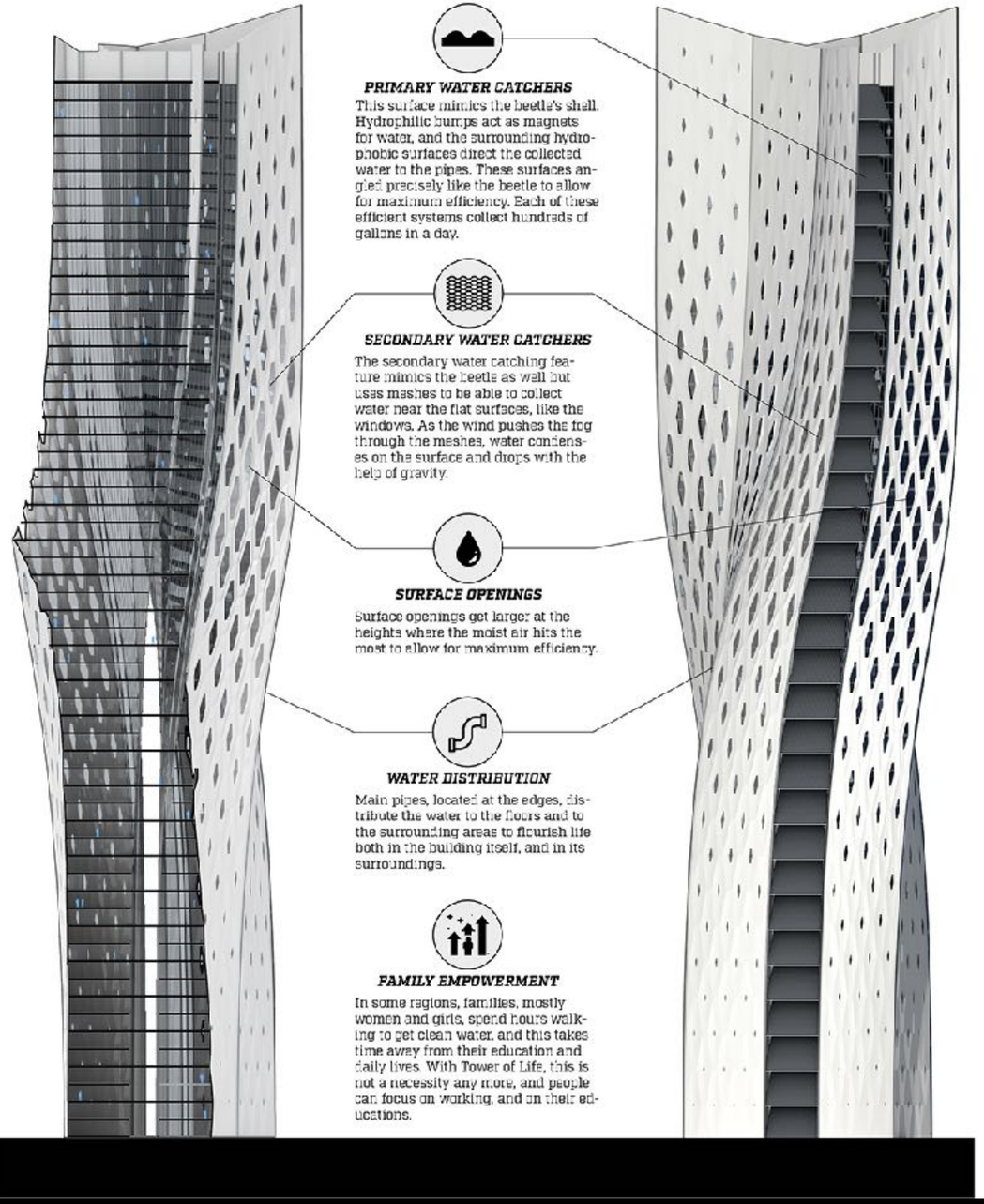


Slugs

(87)
35.9
(-?-)
(353)
(19)
100
8:17
INTEGRA
INTEGRA
VENOUS
DRAINAGE

Stenocara
Beetle

Plume
No Plume
WaterPanels
JLG LIFT



***PRIMARY WATER CATCHERS***

This surface mimics the beetle's shell. Hydrophilic bumps act as magnets for water, and the surrounding hydrophobic surfaces direct the collected water to the pipes. These surfaces angled precisely like the beetle to allow for maximum efficiency. Each of these efficient systems collect hundreds of gallons in a day.

***SECONDARY WATER CATCHERS***

The secondary water catching feature mimics the beetle as well but uses meshes to be able to collect water near the flat surfaces, like the windows. As the wind pushes the fog through the meshes, water condenses on the surface and drops with the help of gravity.

***SURFACE OPENINGS***

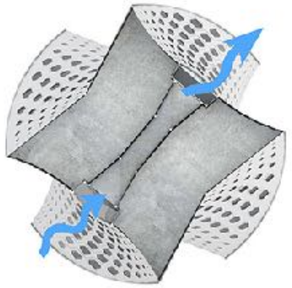
Surface openings get larger at the heights where the moist air hits the most to allow for maximum efficiency.

***WATER DISTRIBUTION***

Main pipes, located at the edges, distribute the water to the floors and to the surrounding areas to flourish life both in the building itself, and in its surroundings.

***FAMILY EMPOWERMENT***

In some regions, families, mostly women and girls, spend hours walking to get clean water, and this takes time away from their education and daily lives. With Tower of Life, this is not a necessity any more, and people can focus on working, and on their educations.



The opening in between two halves of the tower allows air to go through this space and maximizes the water harvesting capacity.

***PHASE I***

New buildings get placed on strategic points to allow for maximum water harvesting efficiency.

***PHASE II***

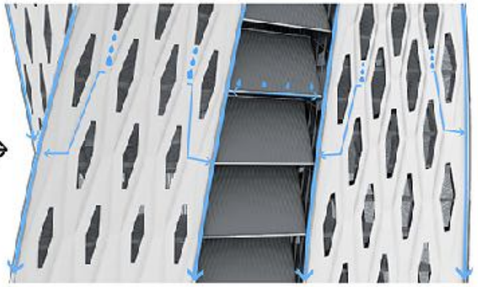
Water catching systems catch significantly more water than building's needs, and the rest is pumped around the building to flourish life.

***PHASE III***

As time passes, Tower of Life network changes the environment in the whole region and creates a better living environment.

At its neutral state, the building's systems hide the water catching elements in their housing to allow for maximum visibility. Moreover, "balconies" are added every other floor, instead of every floor to increase the wind efficiency.

When there is enough moisture in the air, sensors direct this information to the automated system which activates the water catching surfaces and brings them to their water-catching position.

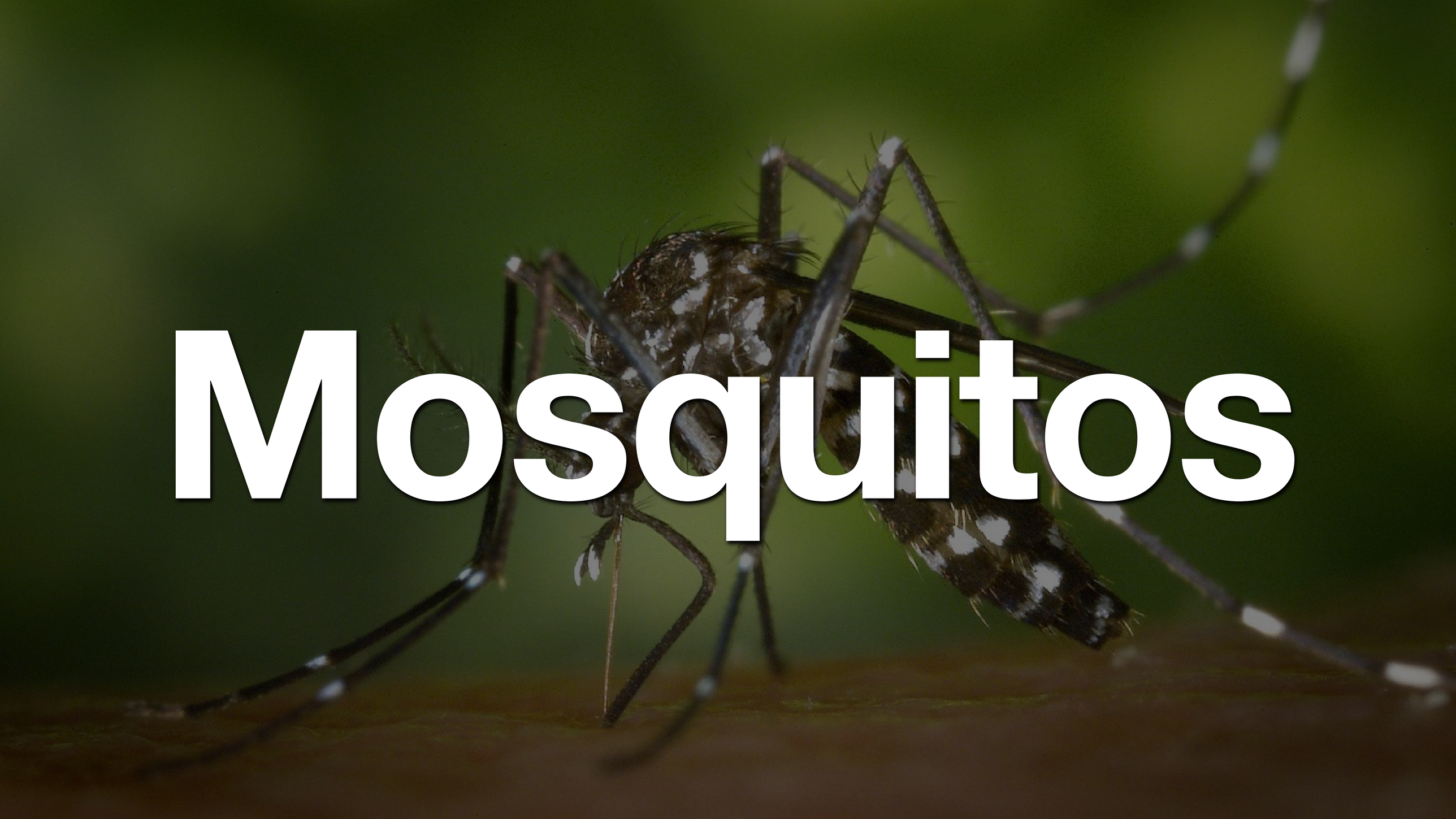


As the water is collected, it's directed to the main pipes at the edges, via the smaller pipes behind the facade, and under each of the primary water catching surfaces.

Healthcare+ PACKAGING

TAKE 5 with Healthcare Packaging

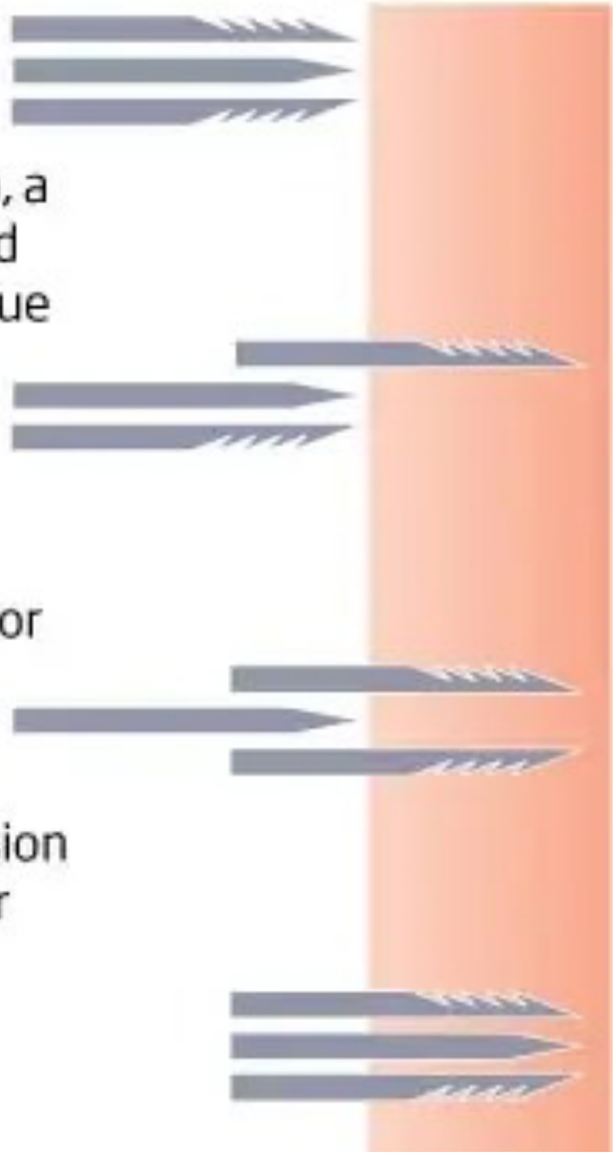
# BEETLE-INSPIRED RETROFIT SAVES WATER IN THE PLANT


Mosquitos

At first glance, it looks simple -- this mosquito
digging her proboscis into us.
SUBSCRIBE

# Taking a three-pronged approach

A needle that works like a mosquito's mouthparts could cut injection pain



Like a mosquito's maxilla, a motor pushes one jagged outer shank into the tissue

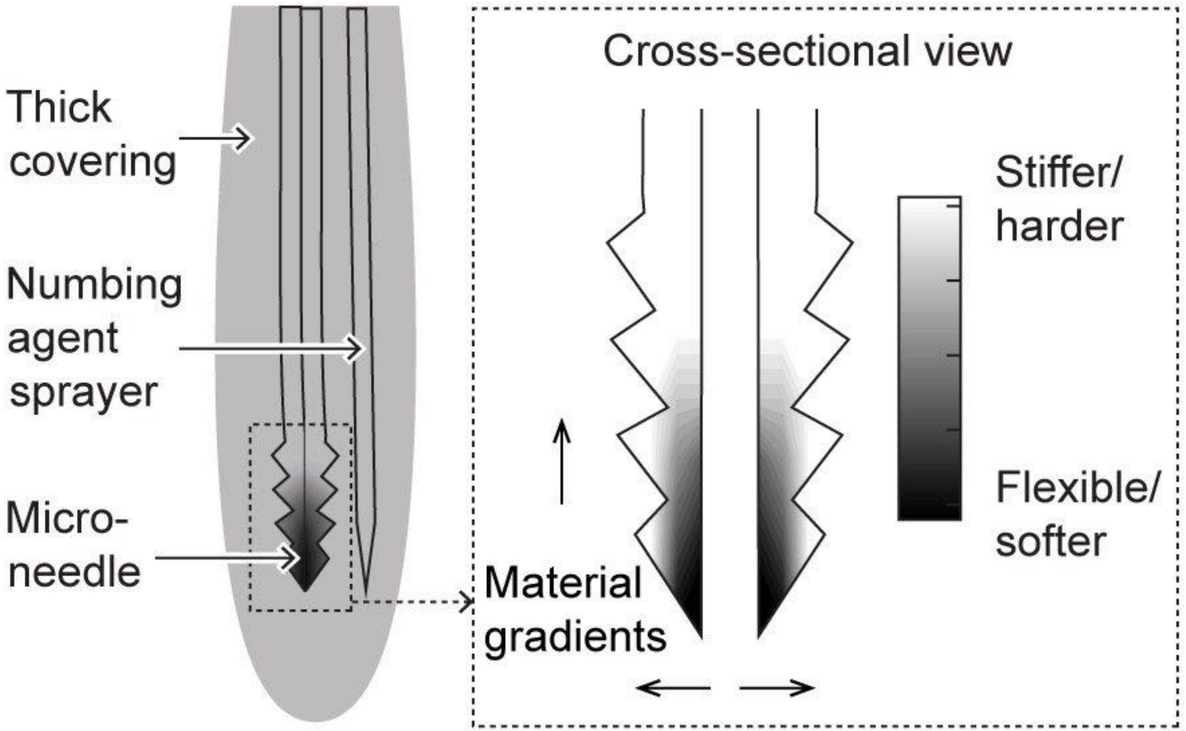
Next, the opposite harpoon-like shank is inserted by another motor

Finally, a sharpened version of the mosquito's tubular labrum delivers drugs

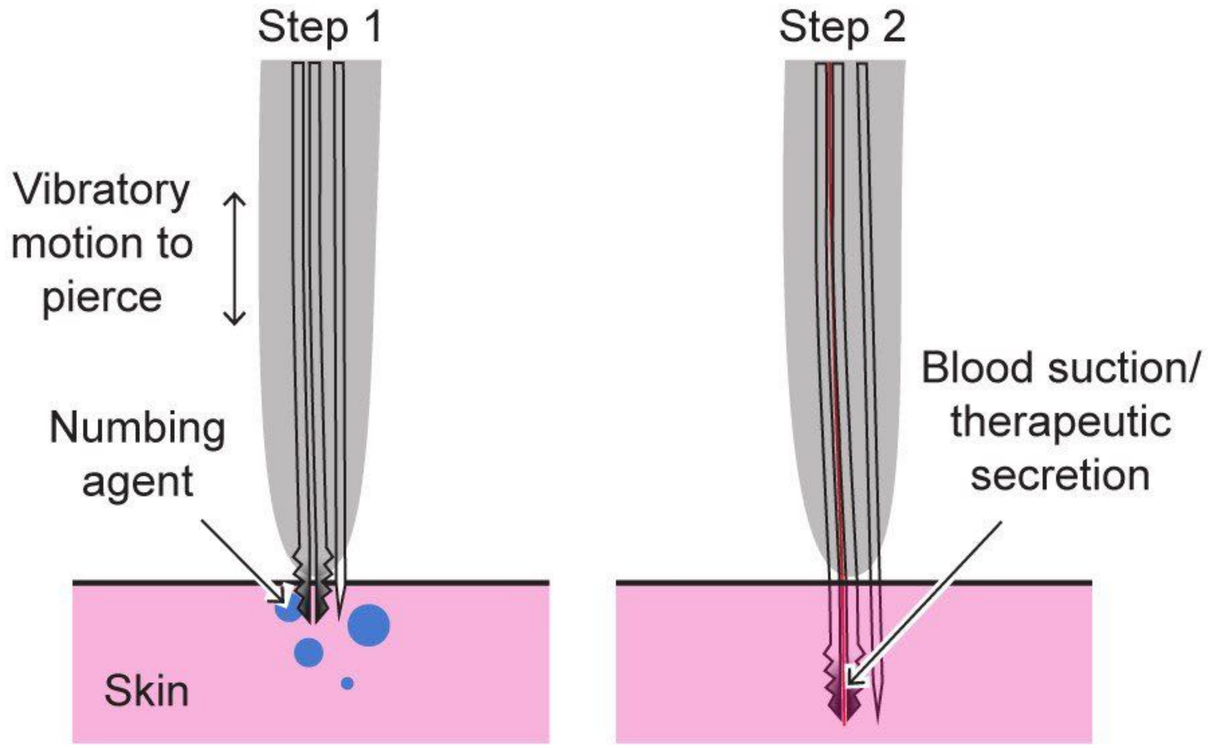
©NewScientist

# Mosquito-inspired microneedle

## Design and material




## Working mechanism



Dragonflies

ROYAL NAVY
GJ706

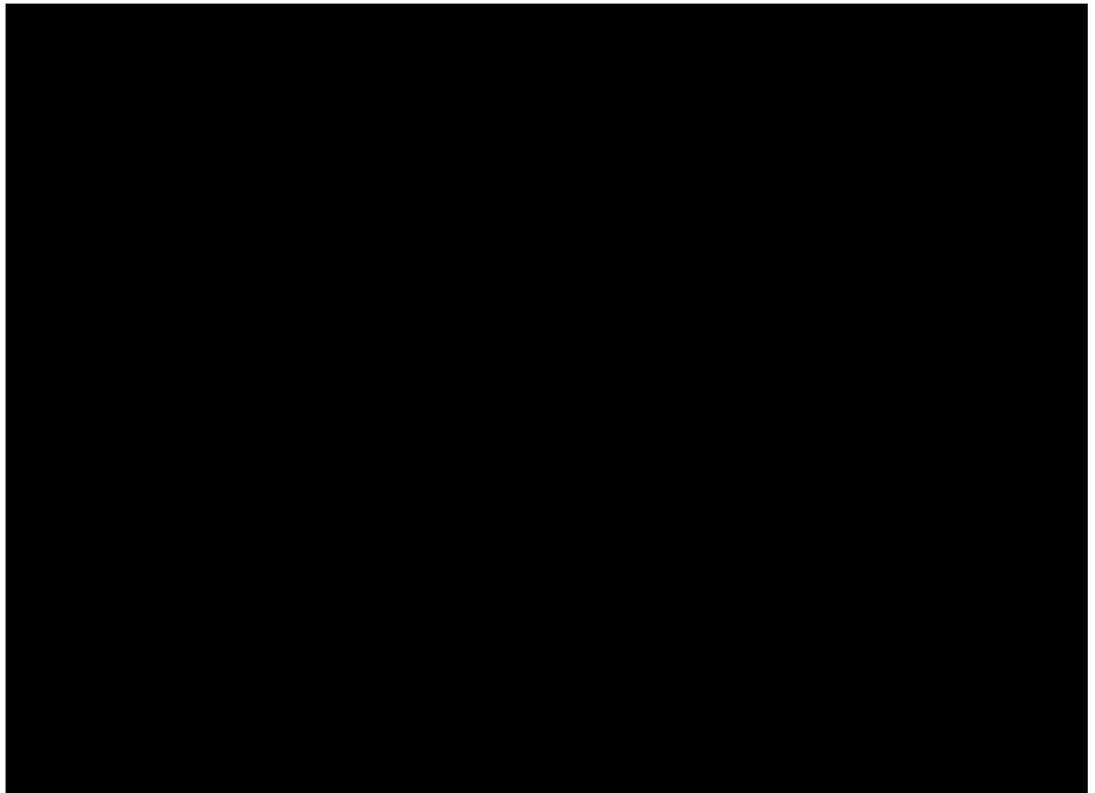
Birds

787
DREAMLINER
BOEING

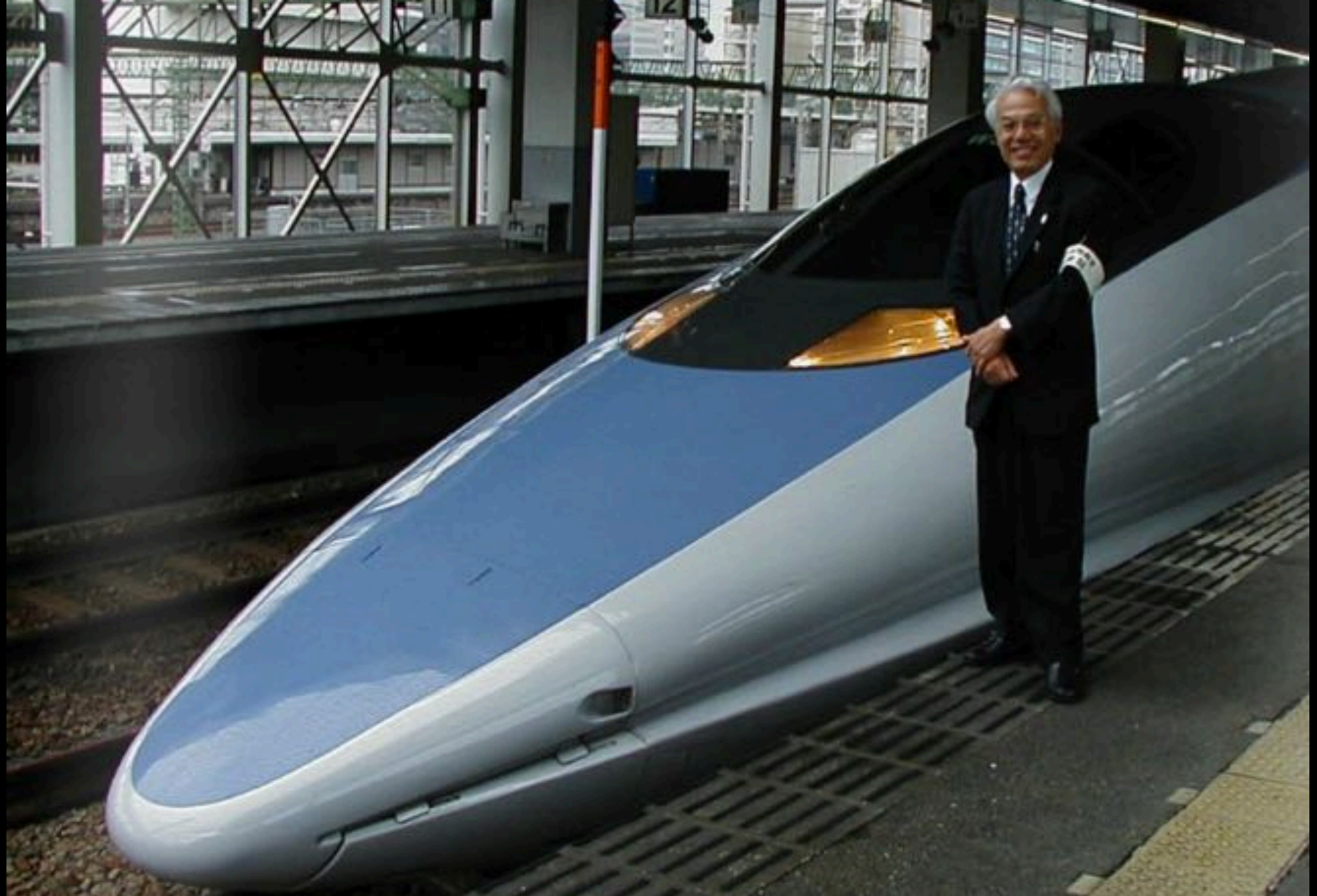
Penguin, Owl
&
Kingfisher

# The Emperor Penguin

NATURE



# KINGFISHERS OF THE WORLD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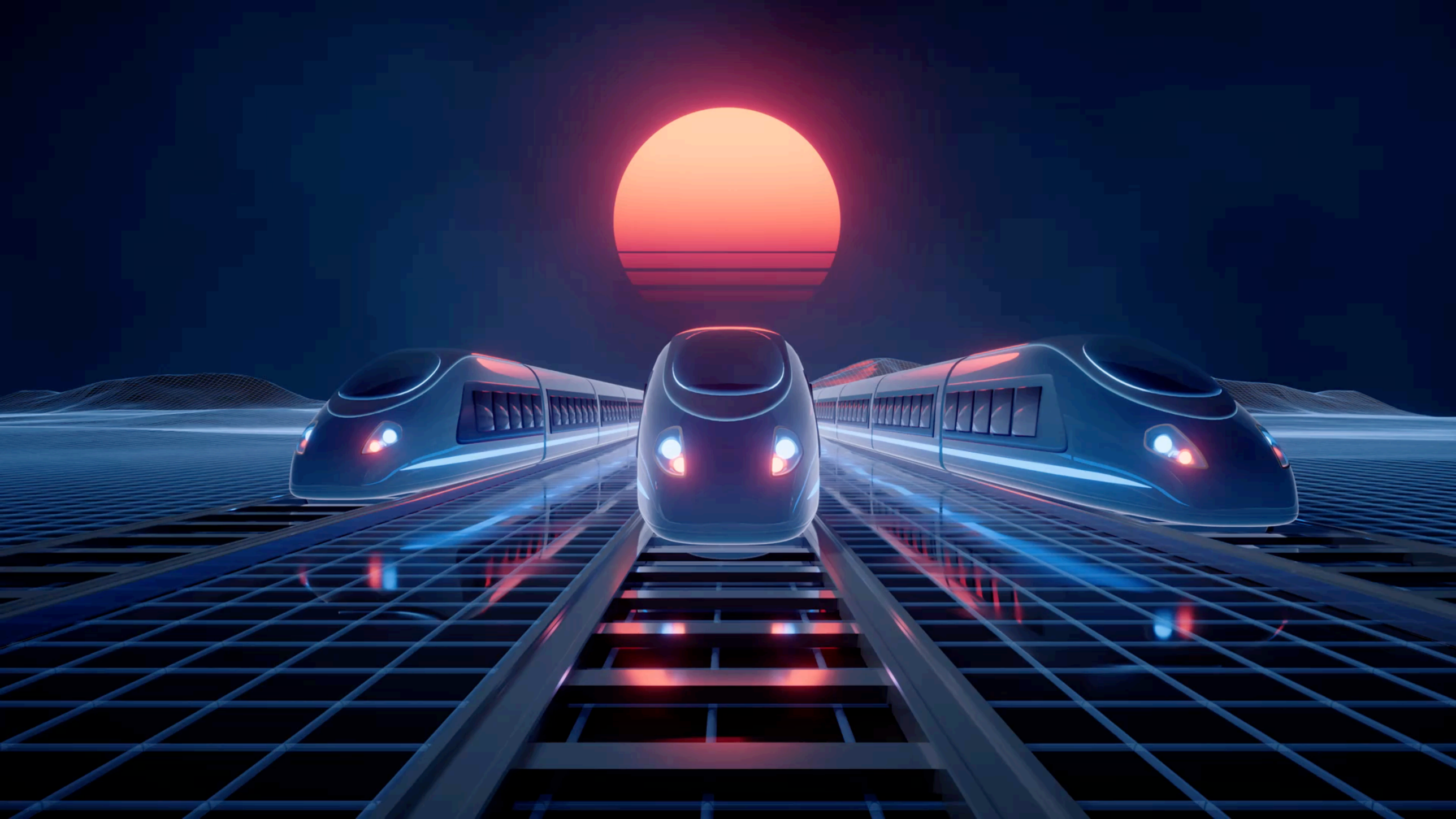
JR500
WEST JAPAN



Mold

*How...*

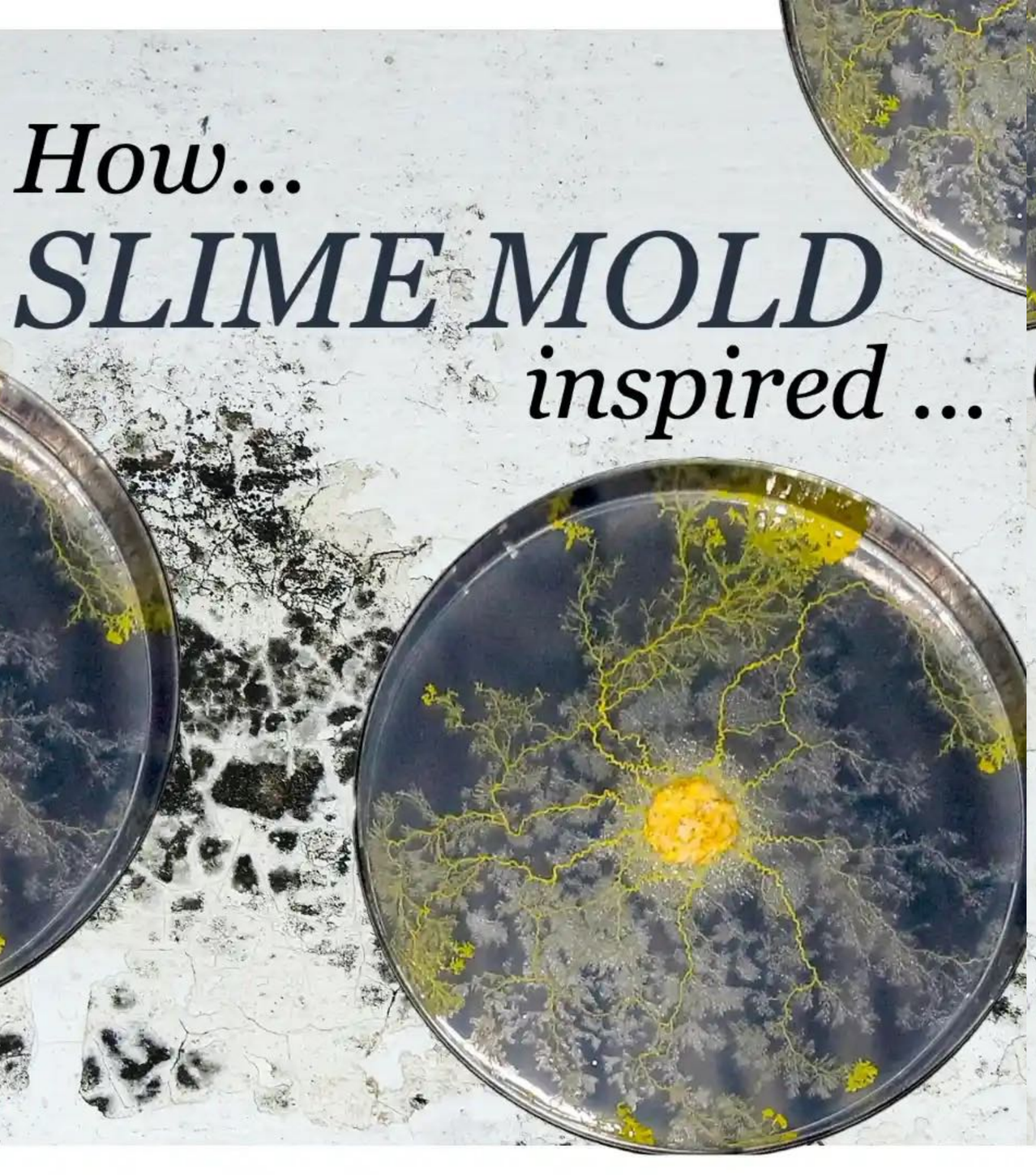
# *SLIME MOLD*

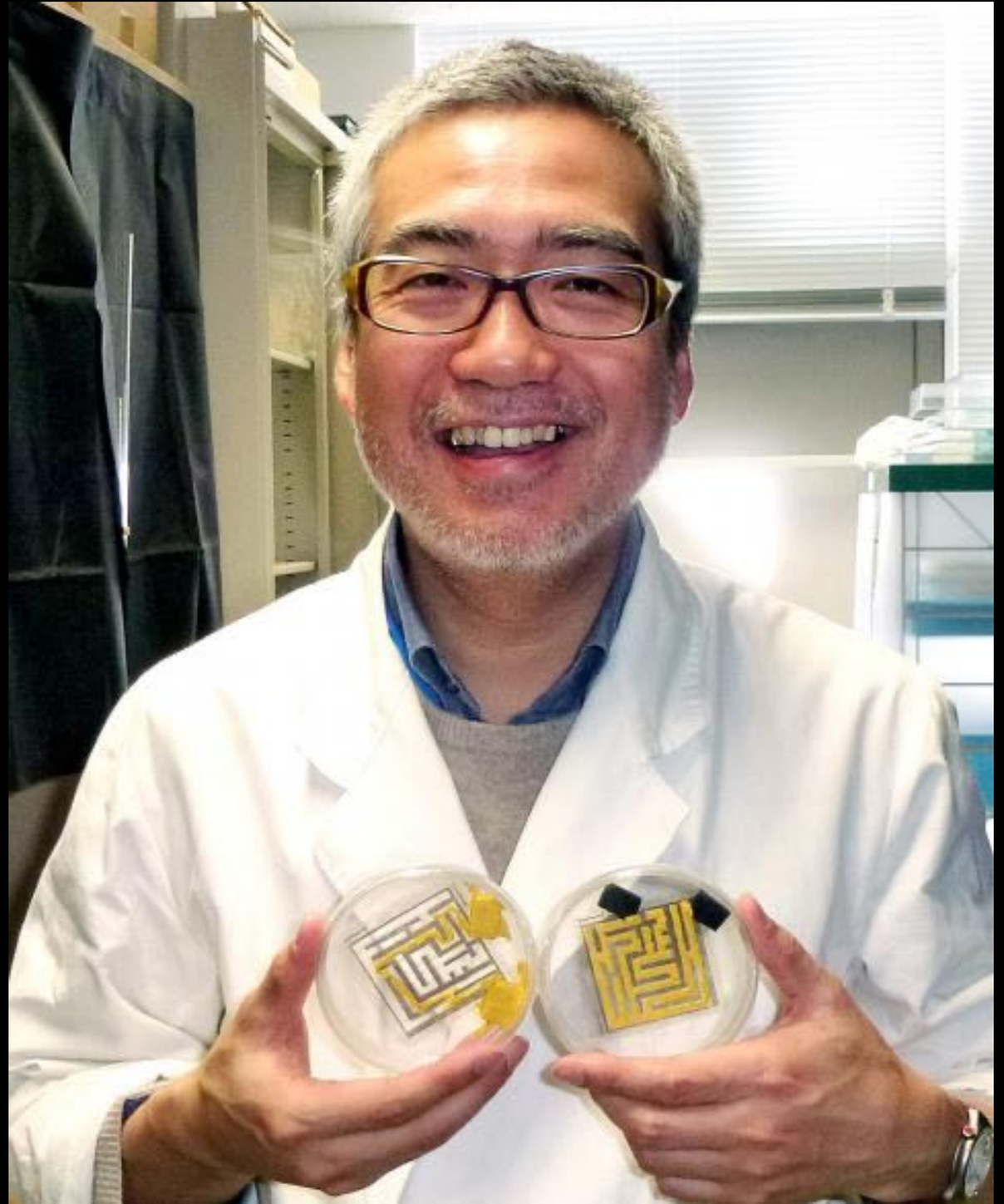
*inspired ...*

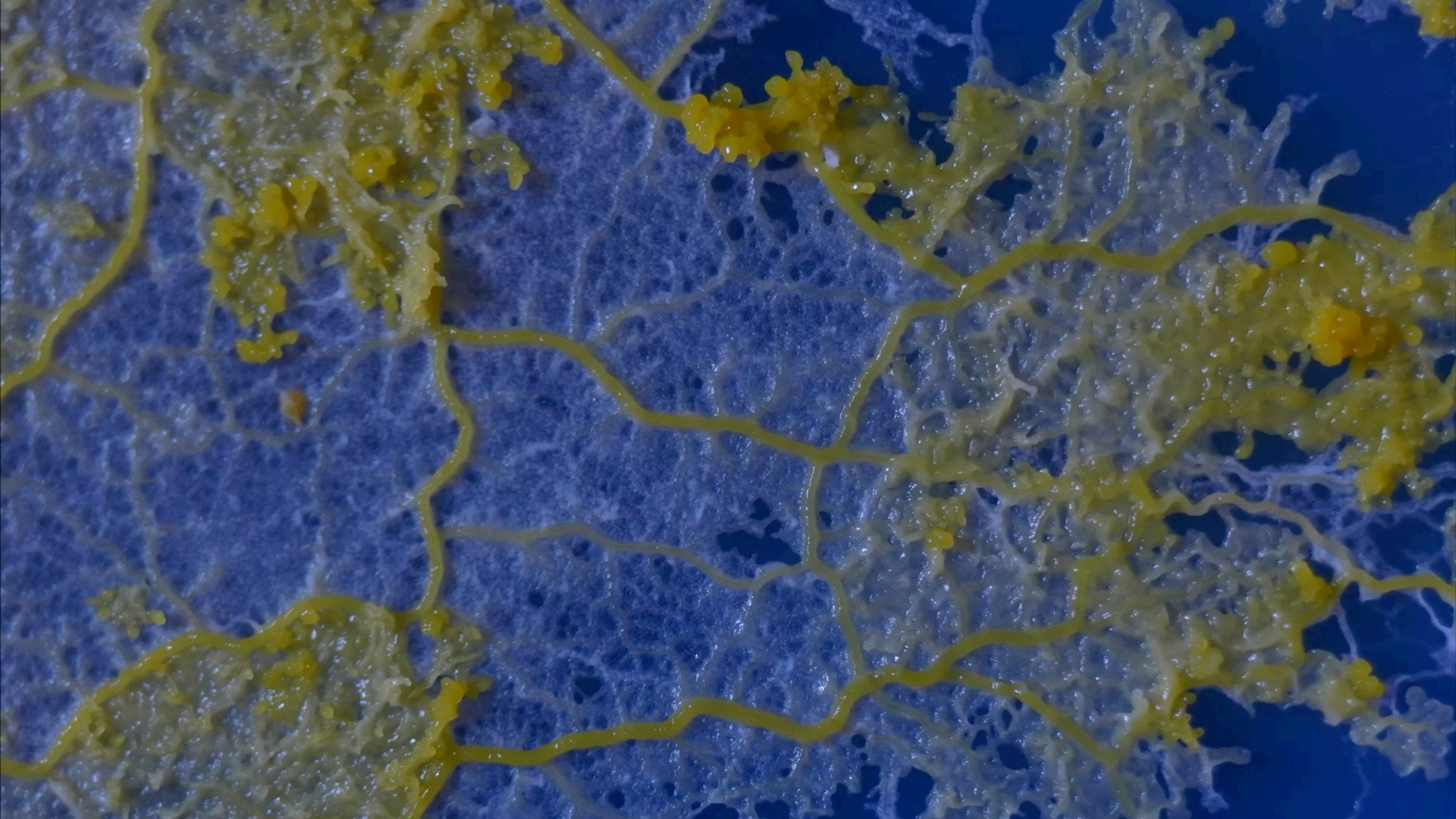
*more efficient*

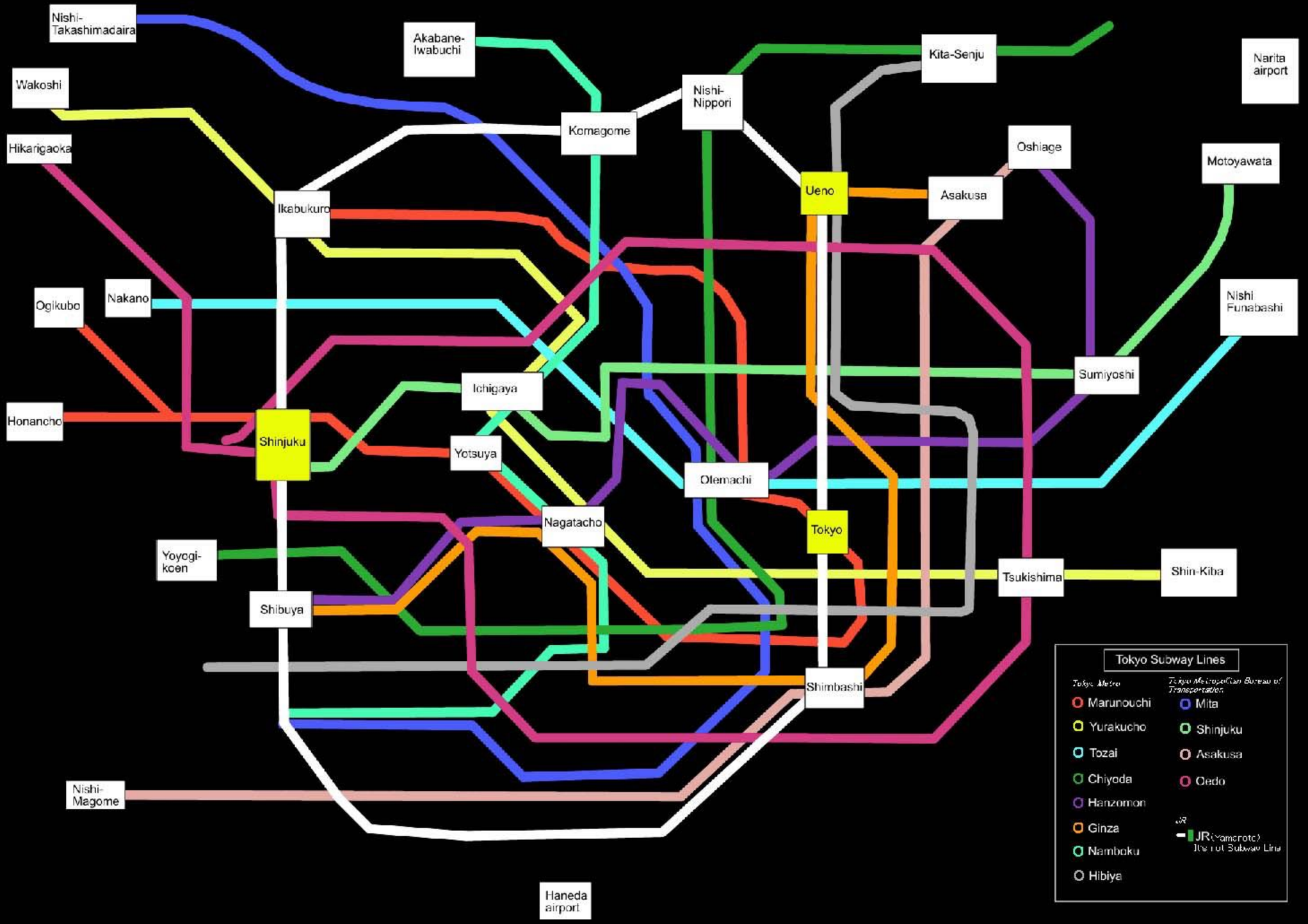
# CITY PLANNING

*Tokyo, Japan*








Nishi-Takashimadaira
Akabane-Iwabuchi
Kita-Senju
Narita airport
Wakoshi
Nishi-Nippori
Komagome
Hikarigaoka
Oshiage
Motoyawata
Ueno
Asakusa
Ikebukuro
Nishi Funabashi
Ogikubo
Nakano
Sumiyoshi
Ichigaya
Honancho
Shinjuku
Yotsuya
Otemachi
Nagatacho
Tokyo
Yoyogi-koen
Tsukishima
Shin-Kiba
Shibuya
Shimbashi
Nishi-Magome
Haneda airport
Tokyo Subway Lines
Tokyo Metro
Marunouchi
Yurakucho
Tozai
Chiyoda
Hanzomon
Ginza
Namboku
Hibiya
Tokyo Metropolitan Bureau of Transportation
Mita
Shinjuku
Asakusa
Oedo
JR
JR(Yamanote)
It's not Subway Line

For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse,

***Romans 1:20***

- “Often when we’re trying to invent solutions, evolution has already solved the problem for us.”
- “We just gotta see how “mother nature” did it.”

- “When the human race is struggling we can often look at biology to find answers.”
- “Biomimicry is where human designs copy ones that are used in nature.”
- “It’s the process of using technology to help us achieve things that plants and animals do naturally.”

- “Evolution is the mother of invention.”
- “It’s been making things for a lot longer than we have.”
- “It made our hands and our brains which is the whole reason we can make anything.”

- “More and more, designers are looking to nature to find solutions to problems we face in the modern world.”
- “Evolution is definitely a better problem solver than we are.”
- “If we could design the way that nature does, we could create solutions…”

**For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse, because, although they knew God, they did not glorify Him as God, nor were thankful . . .**

***Romans 1:20-23***

**…but became futile in their thoughts, and their foolish hearts were darkened. Professing to be wise, they became fools, and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things.**

***Romans 1:20-23 cont…***

**All things were made through Him, and without Him nothing was made that was made.**

***John 1:3***

For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. And He is before all things, and in Him all things consist.

*Colossians 1:16-17*

yet for us there is one God, the Father, of whom are all things, and we for Him; and one Lord Jesus Christ, through whom are all things, and through whom we live.

*1 Corinthians 8:6*

and to make all see what is the fellowship of the mystery, which from the beginning of the ages has been hidden in God who created all things through Jesus Christ;

*Ephesians 3:9*

**And do not be conformed to this world, but be transformed by the renewing of your mind, that you may prove what is that good and acceptable and perfect will of God.**

***Romans 12:2***

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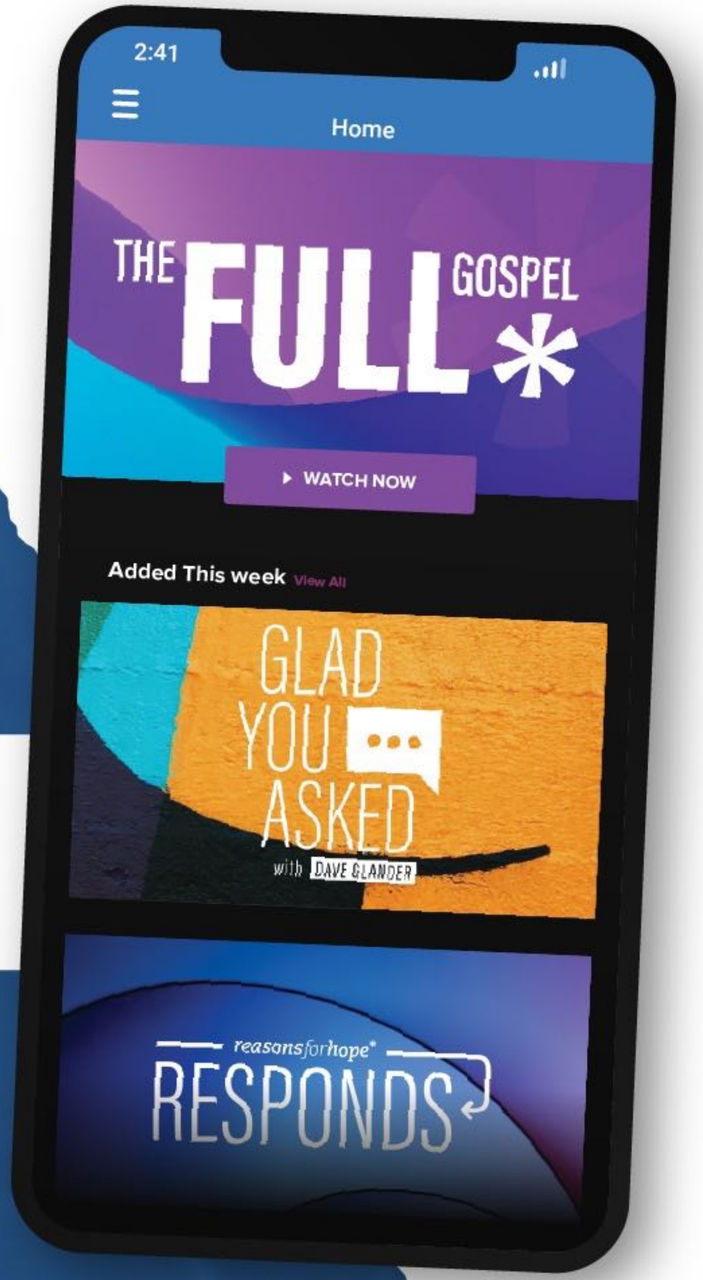
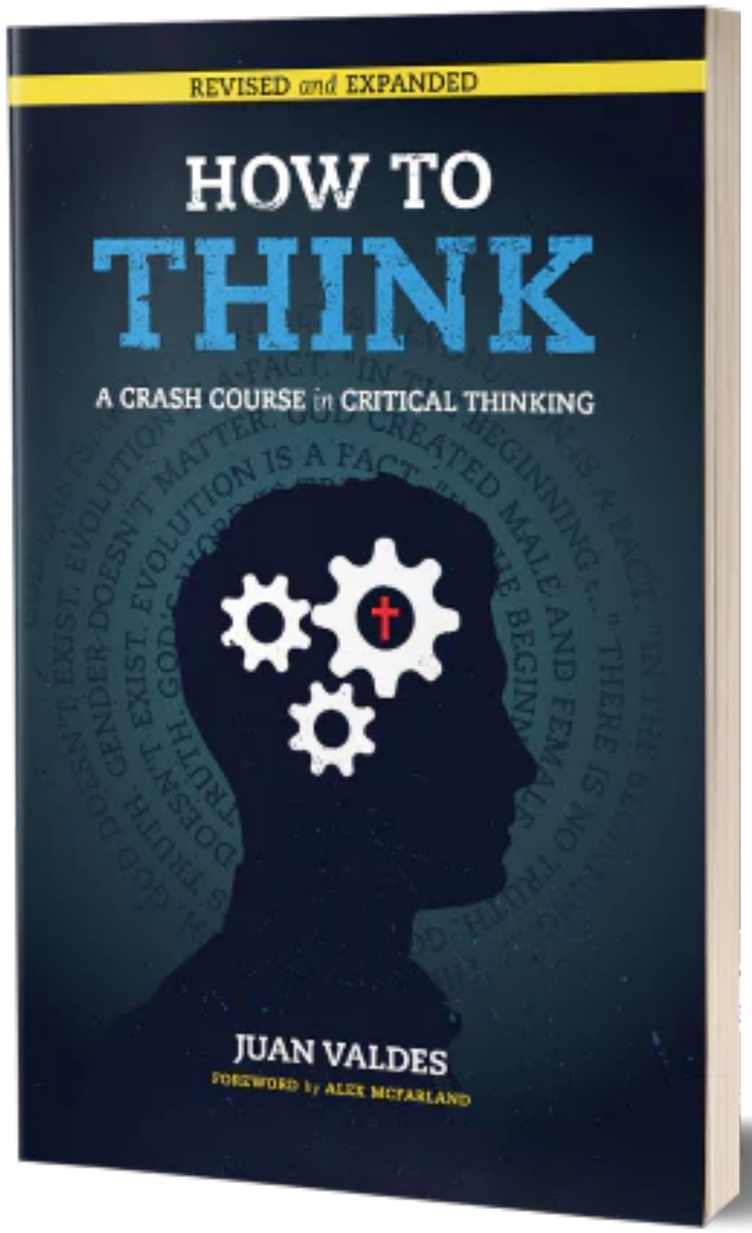





# How To Think

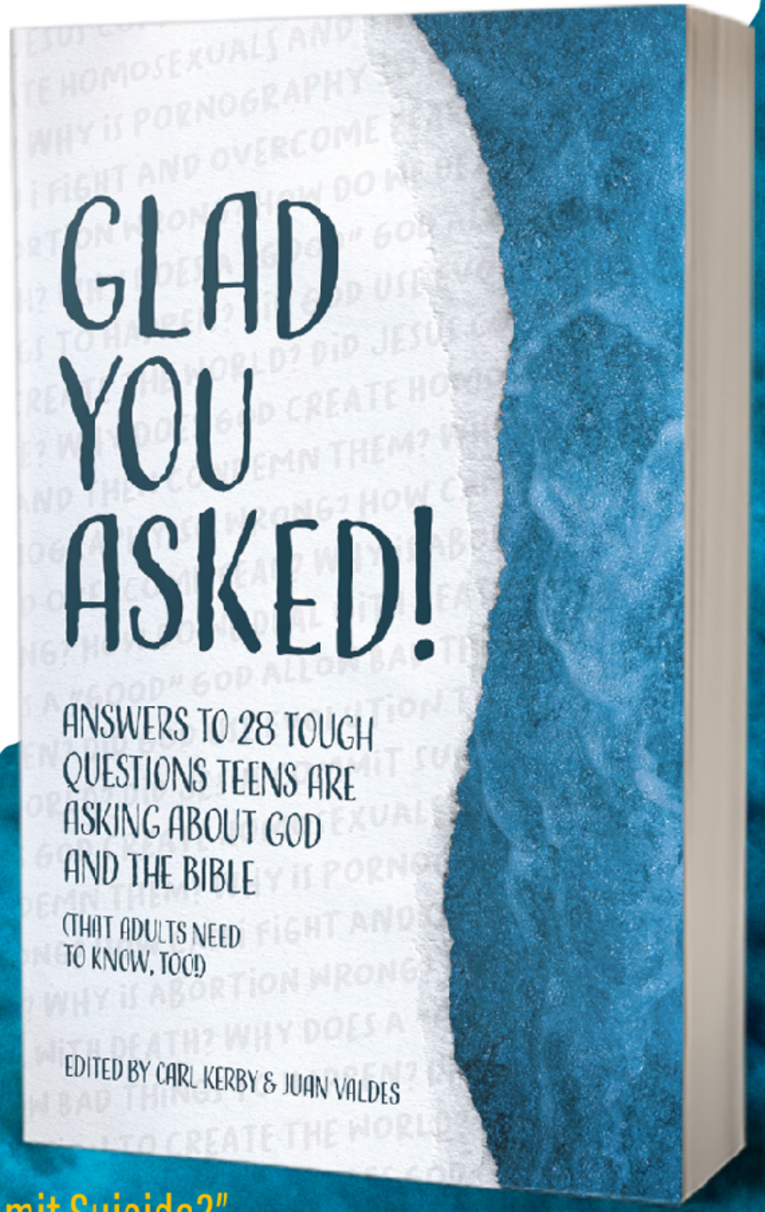
## A Crash Course In Critical Thinking

(Revised Edition)

reasonsforhope*

# LEARN THE TRUTH

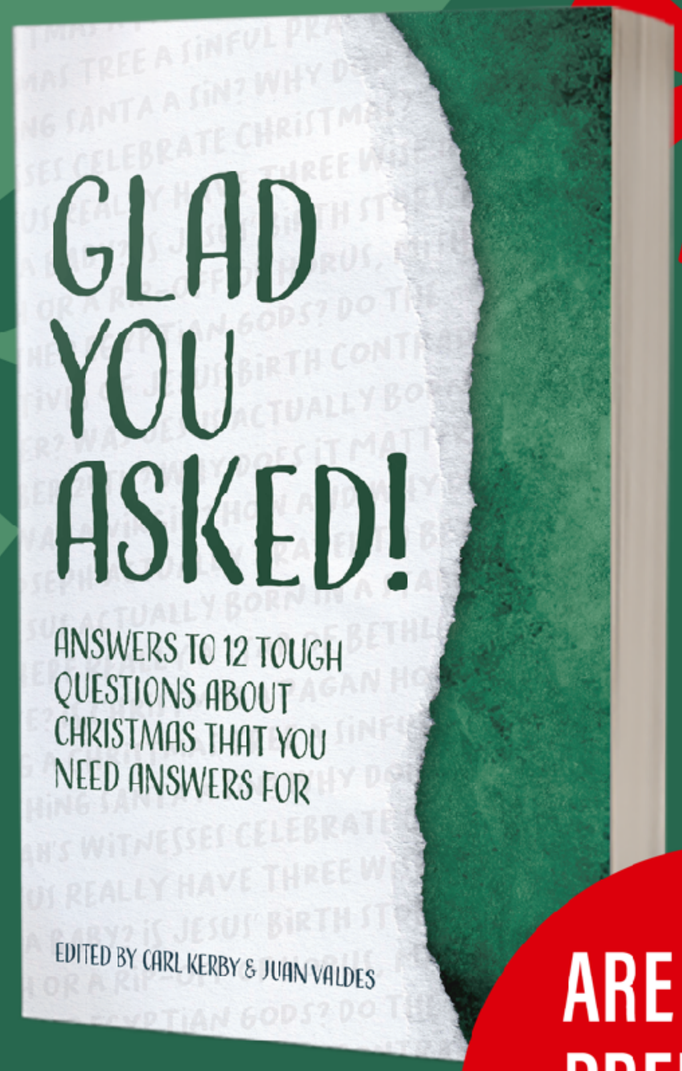
## BEHIND YOUR BURNING QUESTIONS



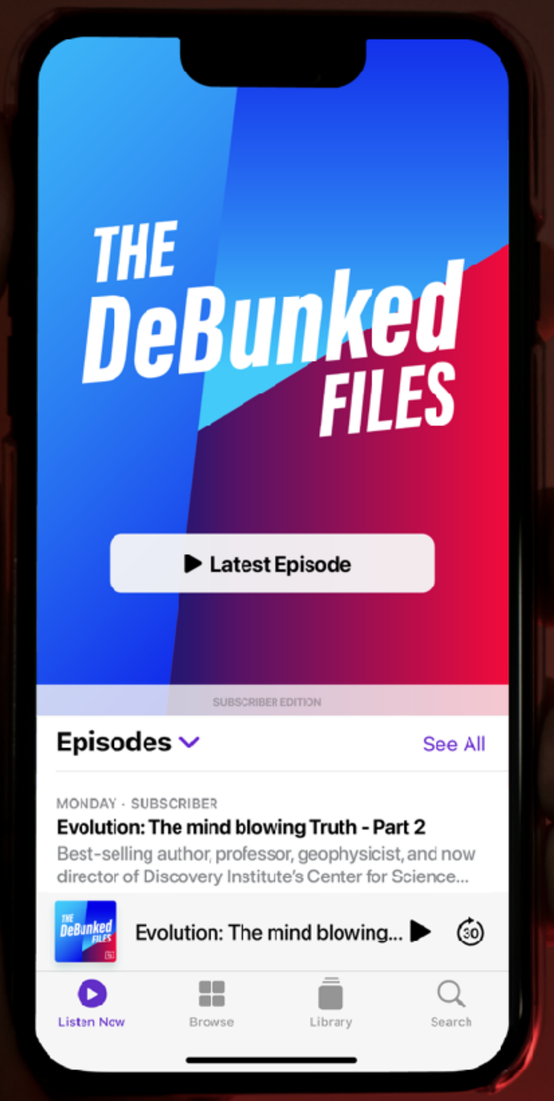

FORMERLY TITLED
"Did Jesus Commit Suicide?"

reasonsforhope*

# "IS CHRISTMAS A PAGAN HOLIDAY?"




ARE YOU PREPARED TO ANSWER?

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reasonsforhope*

# RESPONDS

Watch Frank Figueroa, Carl Kerby and other members of the RforH team provide biblical responses to various hot-button cultural issues.

**Stay Informed. Stay Bold.**

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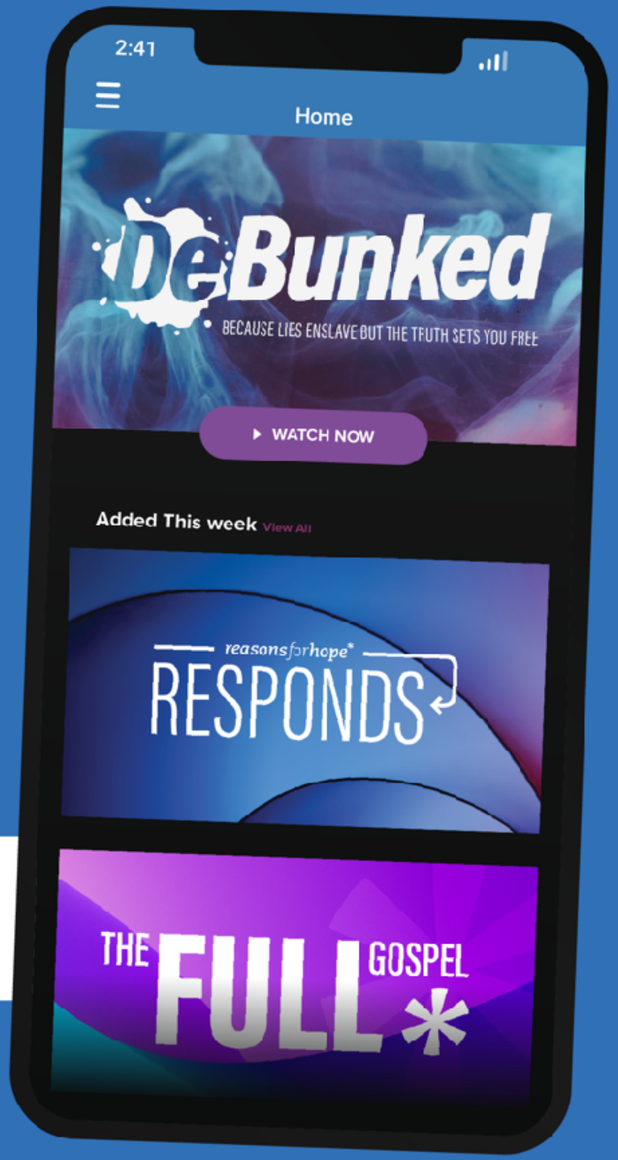

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