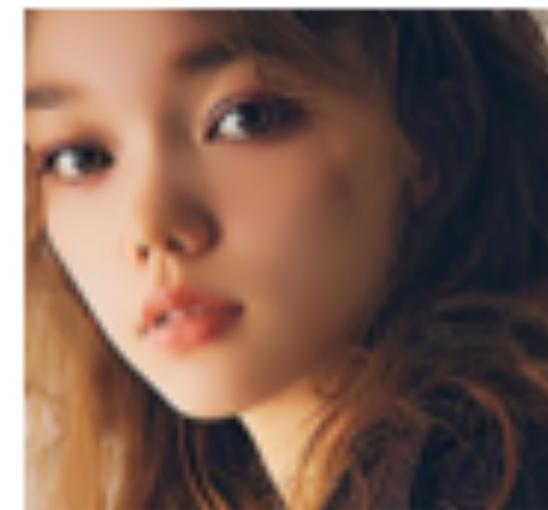


M I N D Q U E S T - A N T H E M



MindQuest is a forum for inquisitive people of all ages. We present and discuss, on an occasional basis, subjects that increase our understanding of and awareness about the world around us - be it scientific, cultural, economic, humaniora
website: BigIdeasForum.info; email: BigIdeasForum@gmail.com

March 3, 2022

Healing complex bone fractures

. . . can be difficult to treat.

Sometimes they require the injured bone to be removed and replaced with bone harvested from elsewhere in the body.

Inspired by the **fontanelle tissue** (babies' skulls), researchers have developed a new method:

. . . an algae-derived **hydrogel** where . . .

(1) one side of that gel is covered with an **electroactive polymer** called polypyrrole (PPy), and (2) the other side contains nanofragments of **biomolecules** derived from plasma membrane

So . . .



When a low-voltage electrical current is applied to the material, the PPy responds by increasing in volume. Because the polymer is only on one side of the strip, it bends to one side - even into semi-circles or a corkscrew shapes

Because the **biomolecules** are derived from cells involved in bone development, they will naturally **mineralize** and harden like bone when placed inside the human body

Microbots will bring the material into the human body where needed.

Utopia: Regrowing our limbs

if some amphibians can, why can't we (anymore)



African Clawed Frog

Utopia: Regrow our limbs

if some amphibians can, why can't we (anymore)



African Clawed Frog

We've already undergone the complex process of growing our limbs the first time, so clearly, we have the "[genetic instruction manual](#)" - question is: Can we wake it up?



Starting point: African Clawed frog - with an amputation



Then, you take a “biodome” and fill it with a cocktail

Cocktail: a gel containing a mixture of four drugs designed to

- (1) mimic the *amniotic environment* and
- (2) encourage regeneration by *reducing inflammation*
- (3) *inhibiting scar tissue formation*, and
- (4) aiding growth of new nerve *fibers, blood vessels and muscles*.

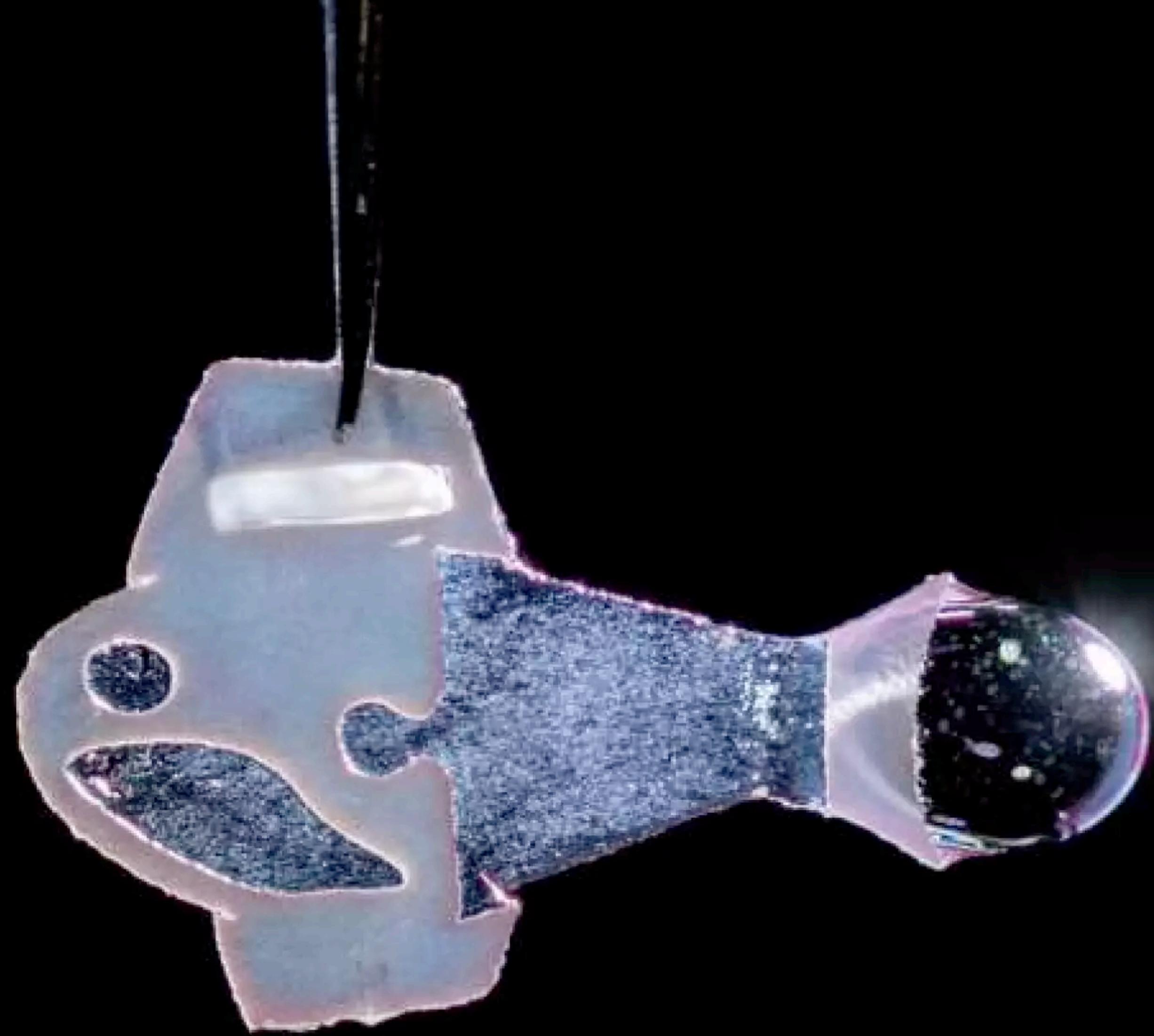


Then, the wound was exposed to the cocktail for
24 hours

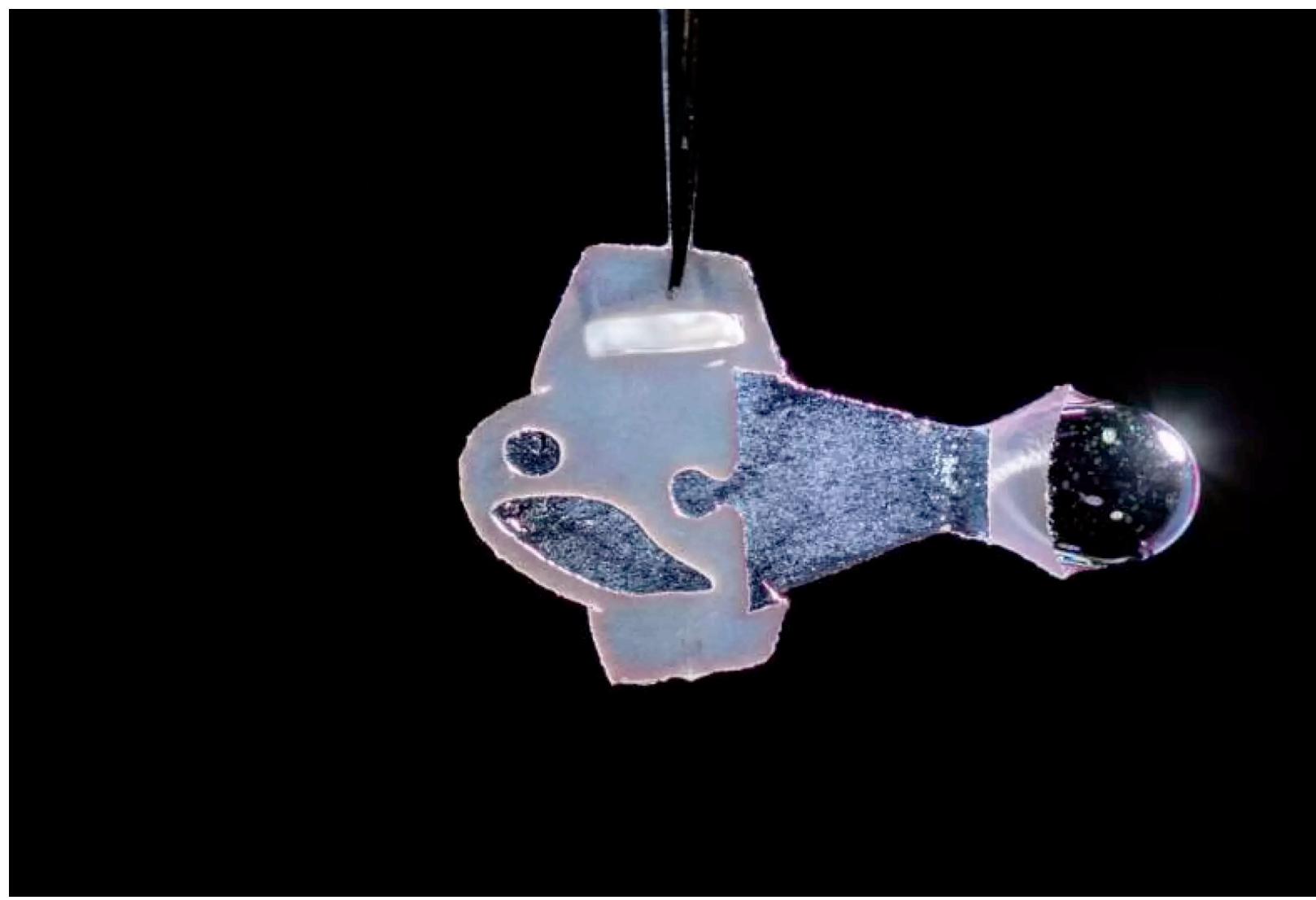
That was enough to trigger the growth of a new,
functional leg over the next 18 months.

Note 1: The biome was only on for 24 hours;
that was the “wakeup call!”

Note 2: This has not been tried on humans yet - but
that is only a matter of time.



Biohybrid Fisk

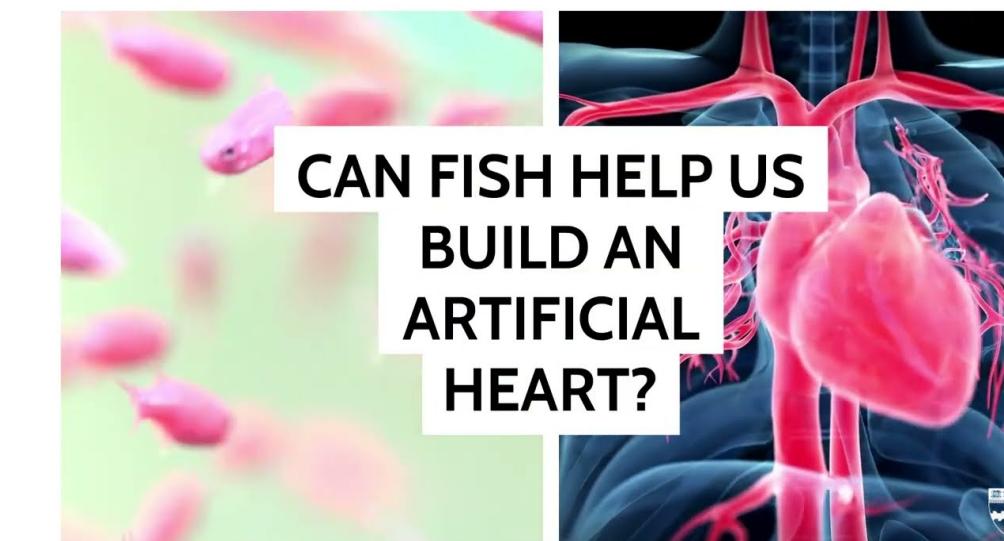


. . . a layer of *cardiac cells* on each side of its tail fin that contract and stretch in an alternating pattern

. . . each time a muscle stretches or contracts, it triggers the opposite motion to follow

. . . a pacemaker-like node helps keep the frequency and rhythm on track, creating an ongoing closed-loop system

VOILA! . . . the fish can swim on its own power for 100 days . . .
watch here —————->



Searching for the X-particle



. . . which likely existed in the tiniest fractions of a second after the [Big Bang](#), were detected inside a roiling broth of [elementary particles](#) called a quark-gluon [plasma](#)

Watch here: <https://www.space.com/x-particle-spotted-inside-lhc>

Mind controlled robot

Click photo to watch: 2 min 51 sec

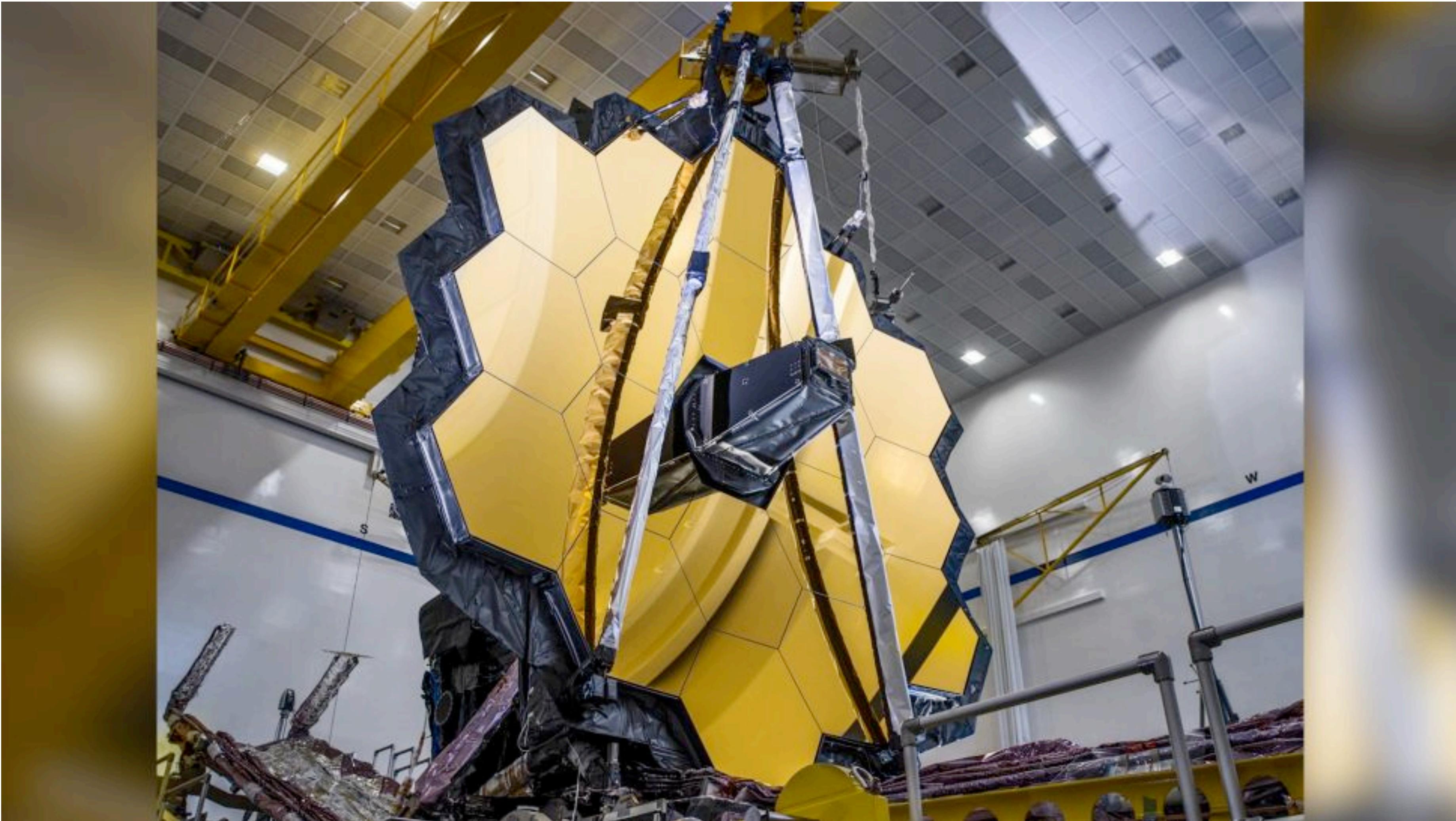


Robotic Guitar



Full article: <https://spectrum.ieee.org/video-friday-robot-guitar>

The James Webb Telescope



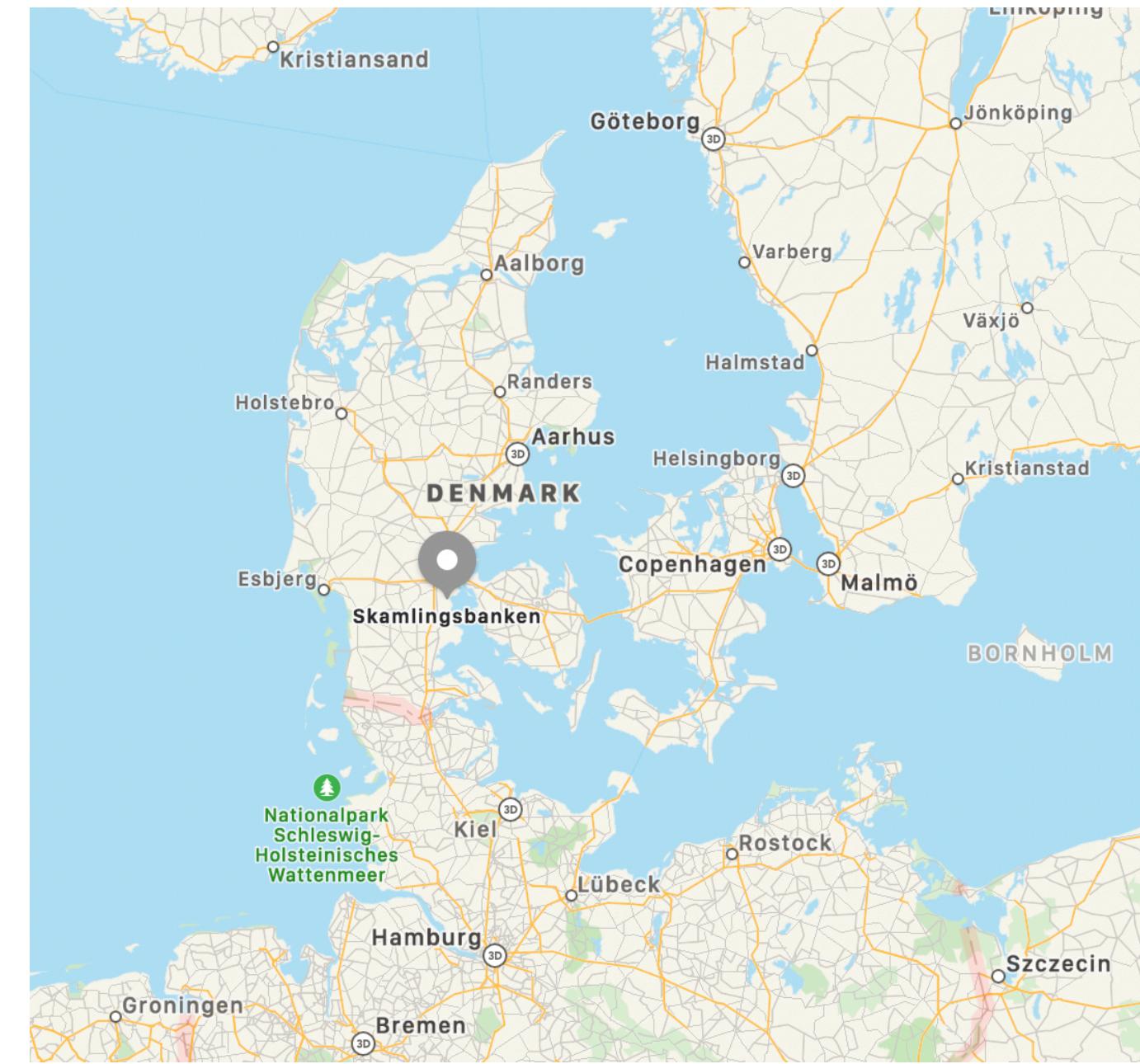
Click to watch: <https://www.space.com/james-webb-space-telescope-optics-explained>

Windmill wings



It's in Aalborg,
Denmark...

[https://www.weforum.org/videos/wind-turbine-blades-
are-being-recycled-as-bike-shelters/](https://www.weforum.org/videos/wind-turbine-blades-are-being-recycled-as-bike-shelters/)



Skamlingsbanken

Building a national museum
that hides in the landscape



Skamlingsbanken





Skamlingsbanken



REBEL WISDOM

Take Back Your Attention

4 min 17 sec

Click to watch: <https://youtu.be/GyHxau5Calc>

Netflix: Tristan Harris, "The Social Dilemma".

Some questions we could discuss at MindQuest

- What are the long-term threats to humanity?
- Could medical science lead to indefinite life extension?
- If life is to go on indefinitely, don't we have to leave the solar system?
- One thing is GAI, what about Quantum General Intelligence? Can it be governed?
- Is it possible to have enough bandwidth for 5+ billion people to be in the metaverse?
- Do we need a US Fed digital currency?
- What is the future of cryptocurrencies (environmental implications of its high energy demands?)
- What are the implications of digital censorship and biases to democracy?
- Will future governments be artificial intelligence?
- How should we change education and learning to face our global challenges?
- If we would scrap the US tax code *entirely*, what tax system (if any?) would we put in place?

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