## LOS 60+ EN EL SIGLO XXI:

**TODOS LOS FUTUROS POSIBLES** 

GABRIEL GUROVICH



## ¿Quién sabe lo que está sonando?



#### Ray Kurzweil: Ley de los Retornos Acelerados

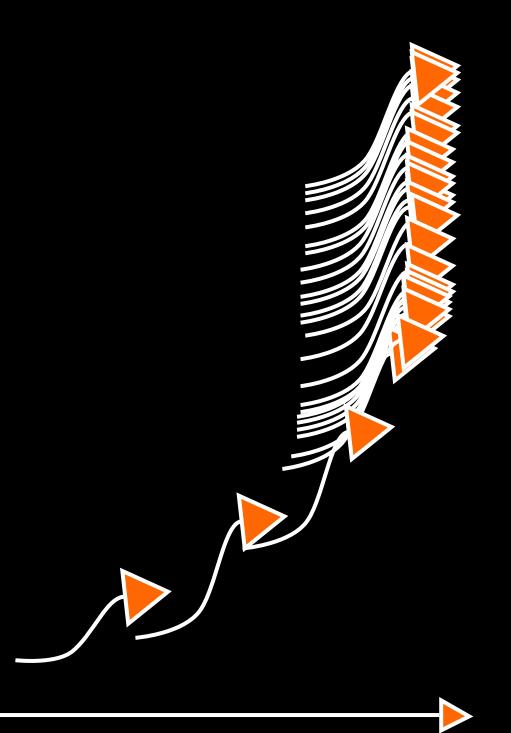
El cambio tecnológico es exponencial, contrario al sentido común y la "intuición" lineal

Las tecnologías de la información (de todo tipo)

## DOBLANSUPODER

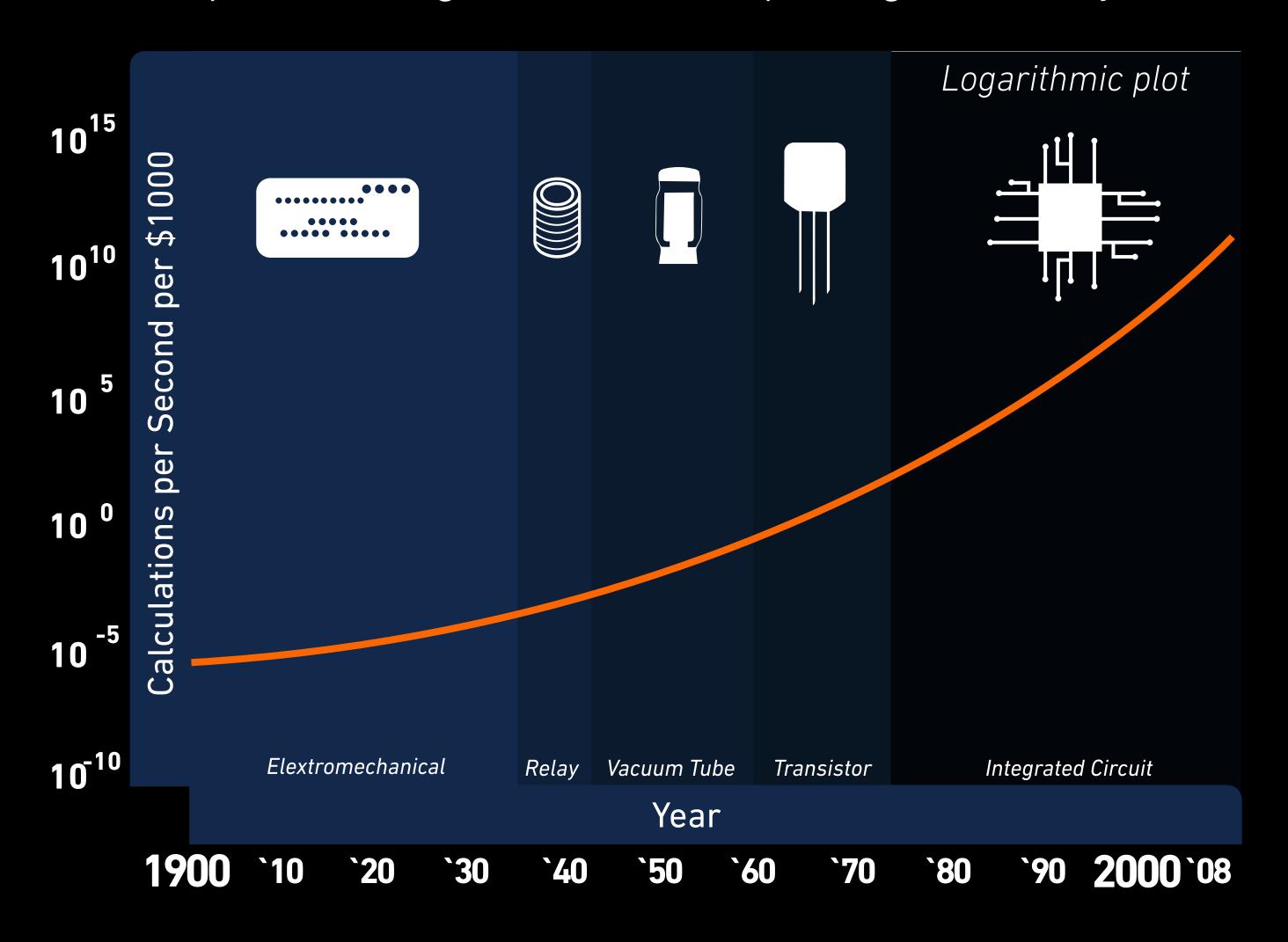
(precio/performance, capacidad, ancho de banda, etc.)

## CADA ANO



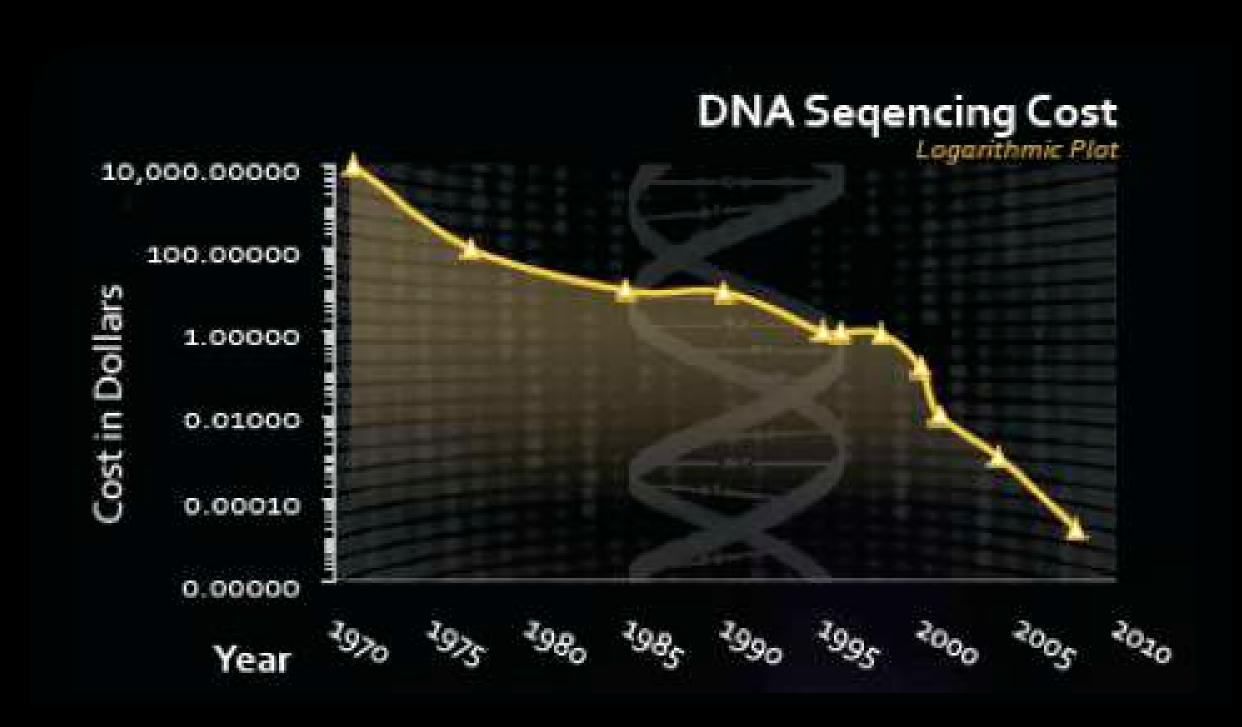
#### Exponential growth of computing for 110 years

La ley
de Moore
es sólo
un ejemplo!

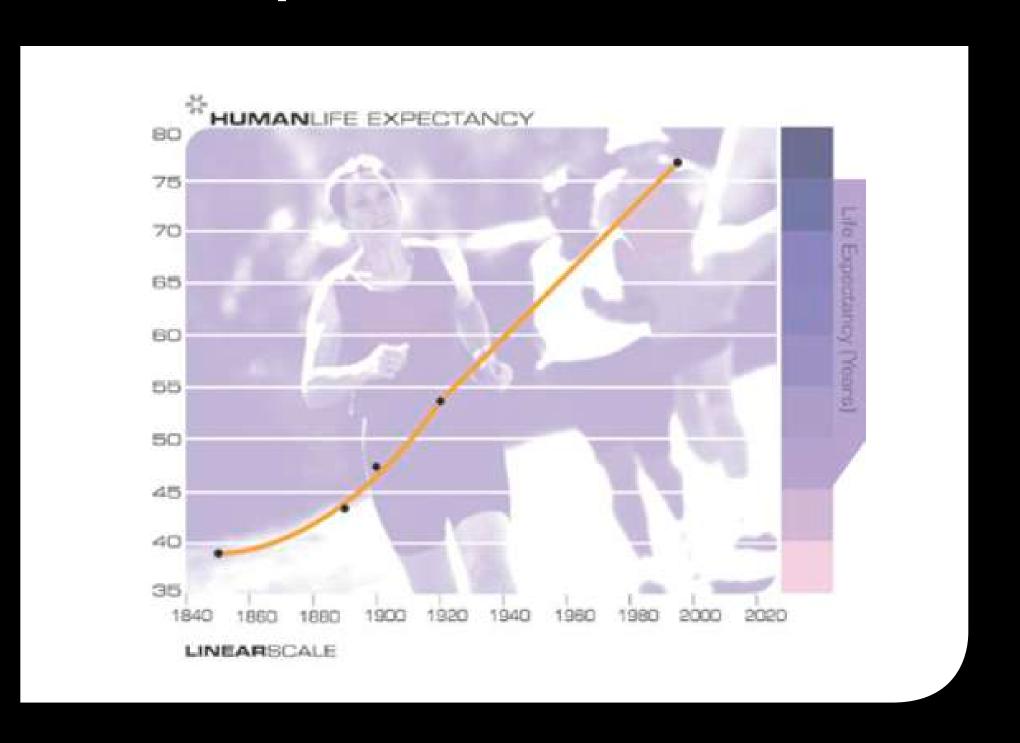


### y se verifica en otras áreas

#### **DNA Sequencing Cost**



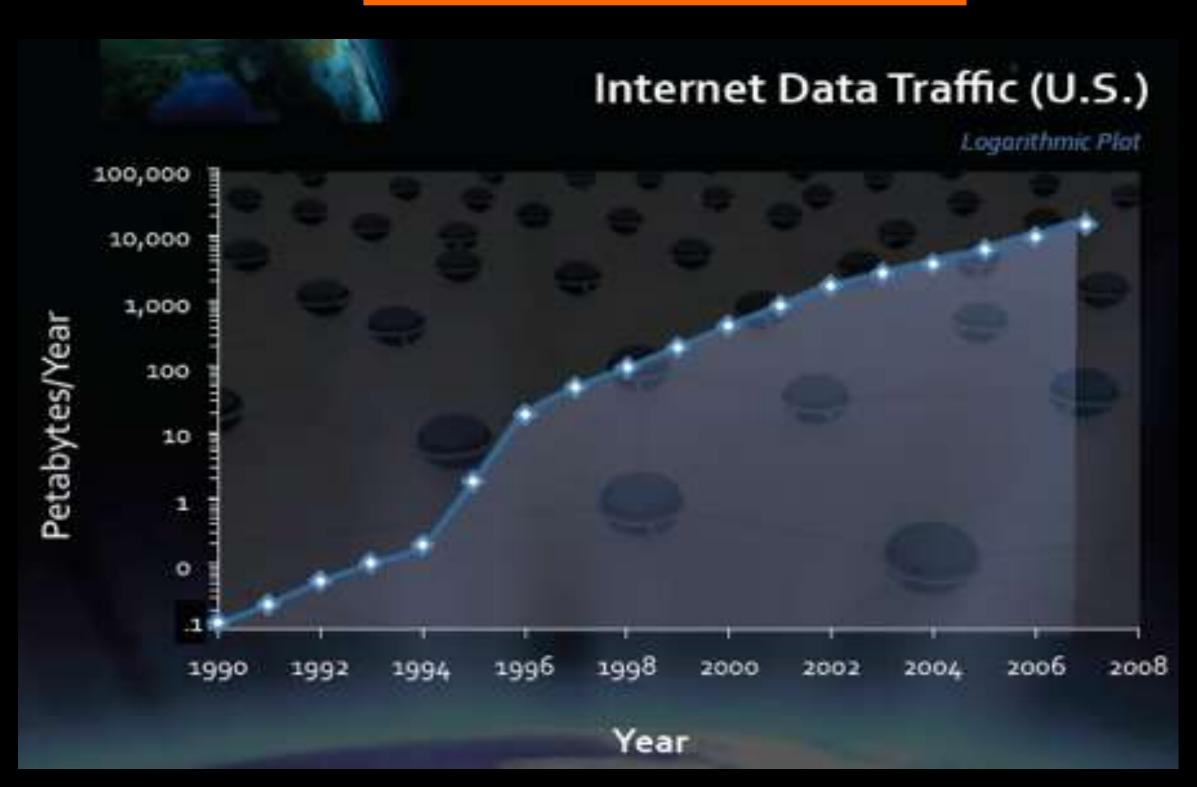
#### Expectativa de Vida

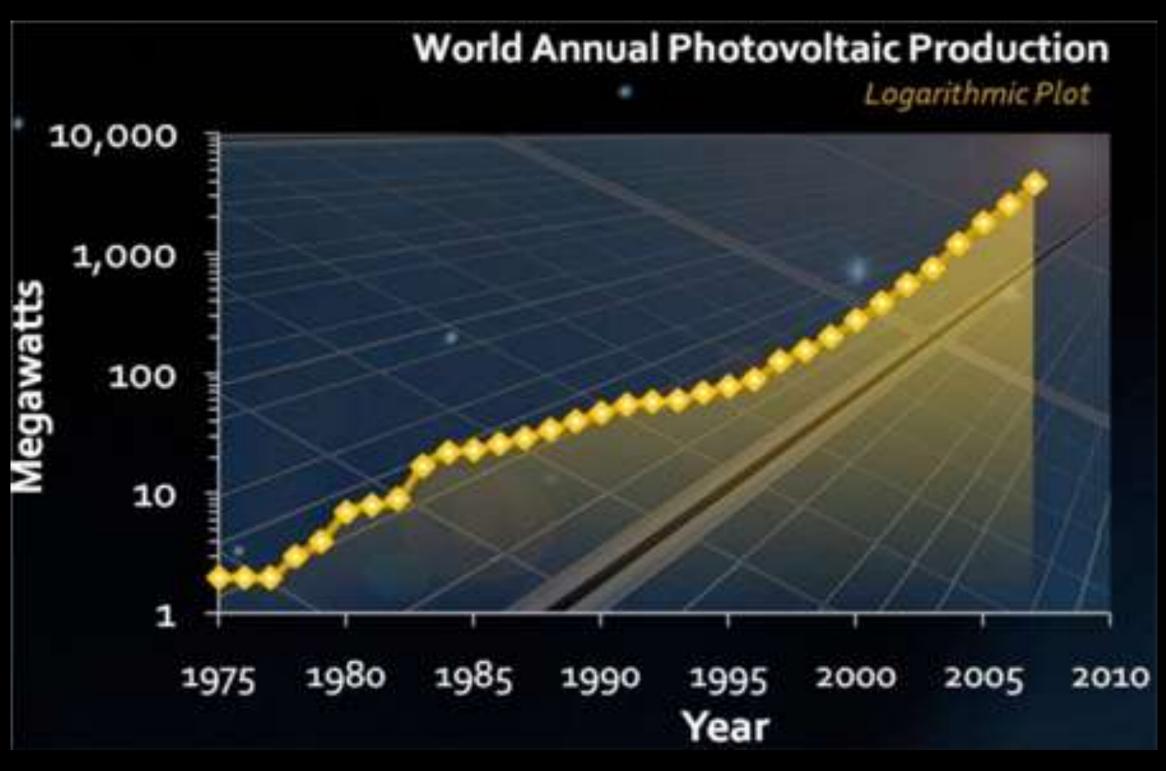


### y se verifica en otras áreas

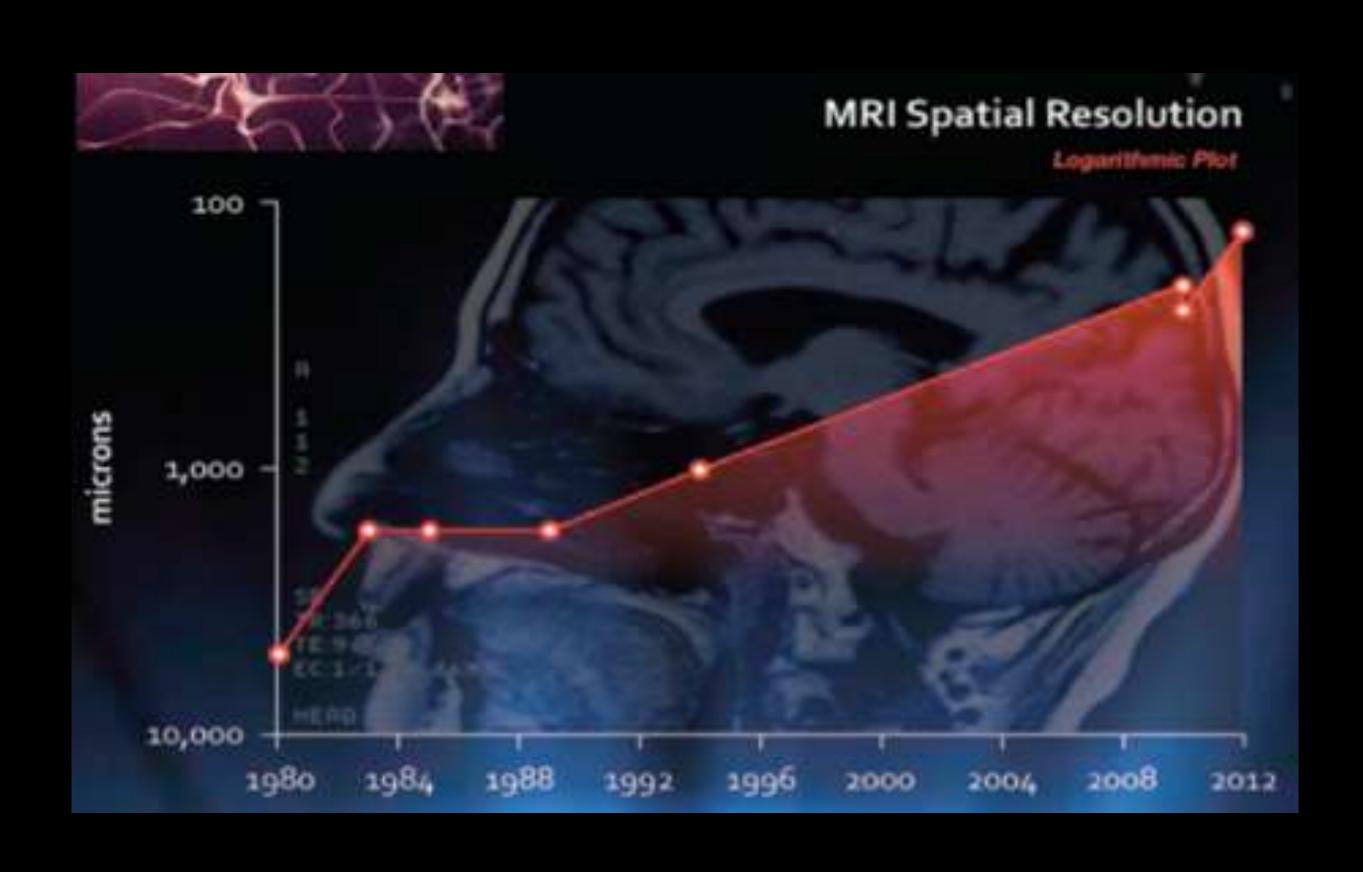
Internet Data Traffic (US)

World Annual Photovoltaic Production





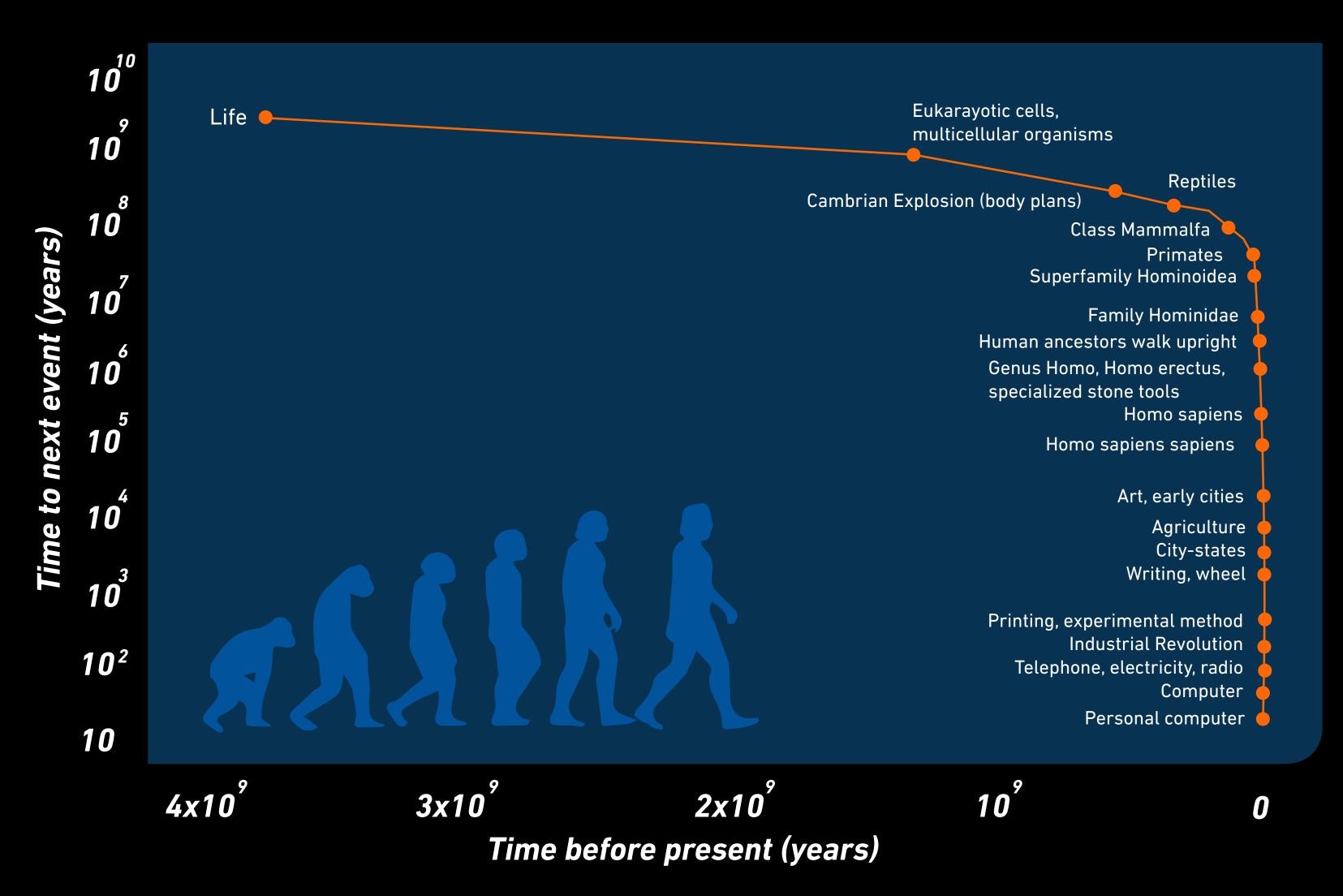
## y se verifica en otras áreas



#### Countdown to singularity

Linear Plot

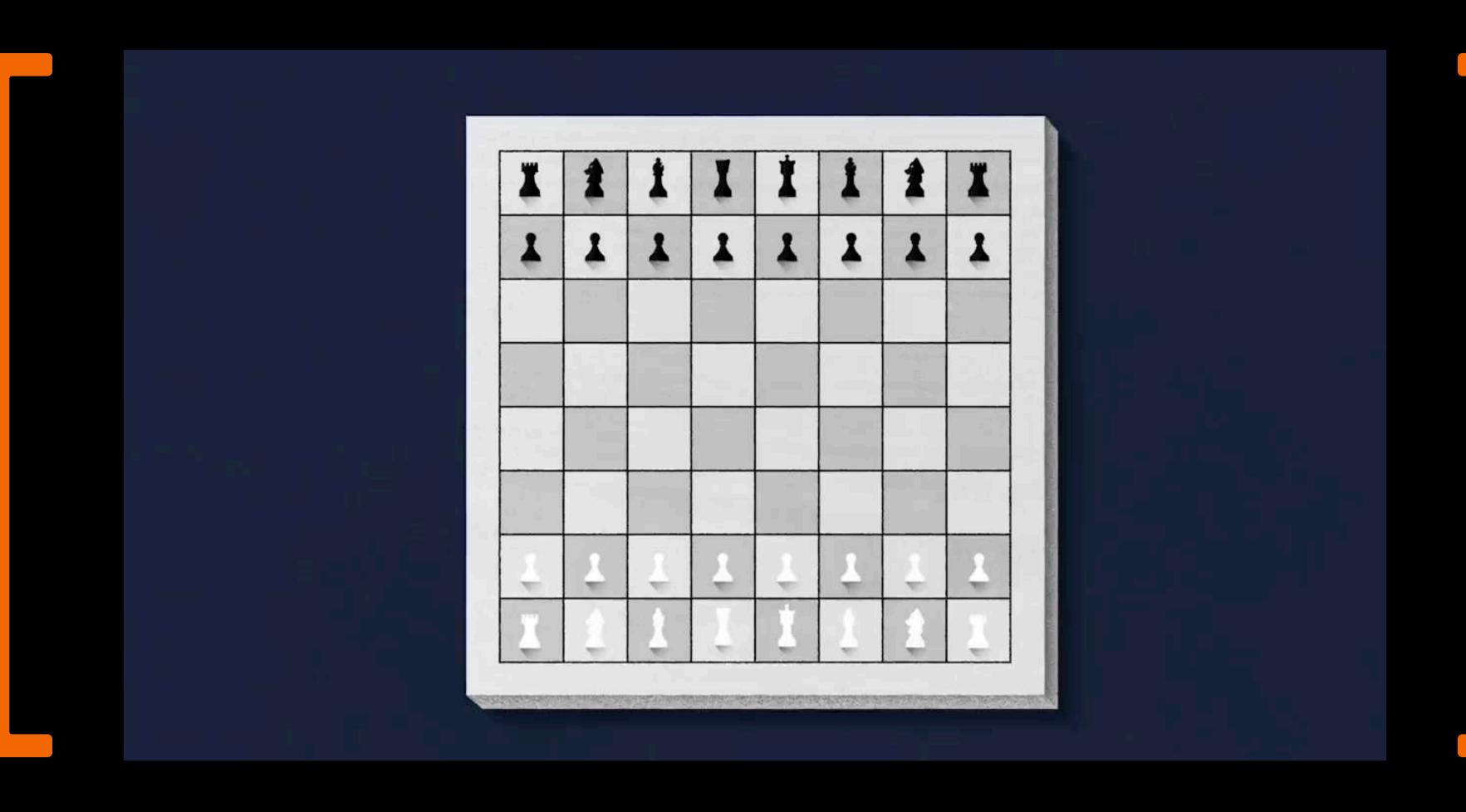
También en la evolución de vida inteligente...



## Hoy: AlphaGo gana 4-1 a Lee Sedol



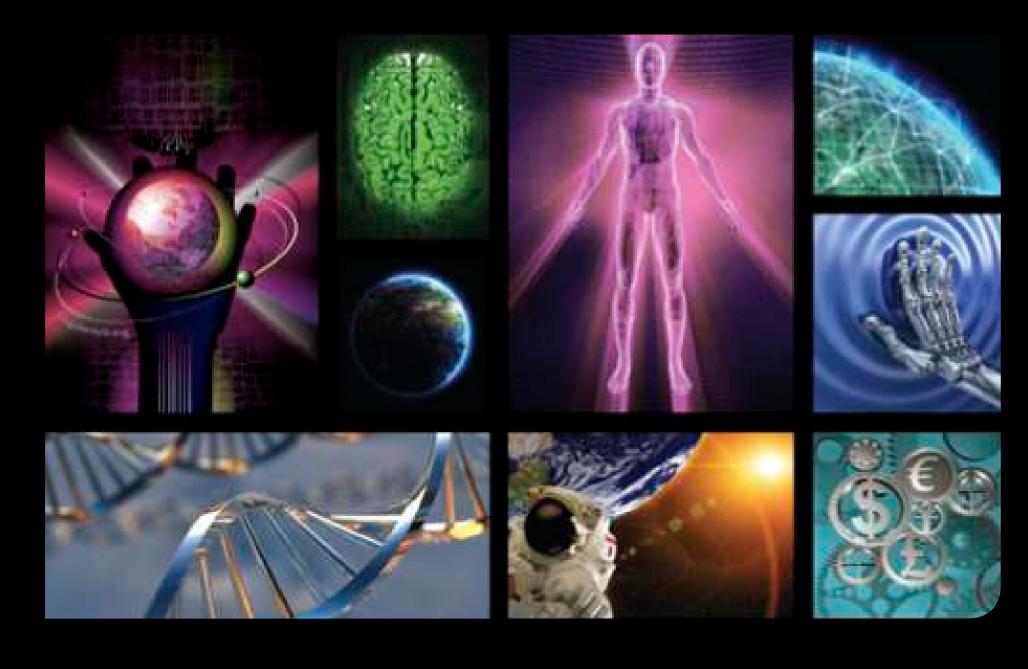
## ...Reconociendo patrones y no por fuerza bruta!



#### Para dónde vamos entonces?

El "Takeover" Tecnológico...
TECNOLOGÍAS EXPONENCIALES

Inteligencia Artificial Robótica Nanotecnología Medicina Neurociencia Energía Computación

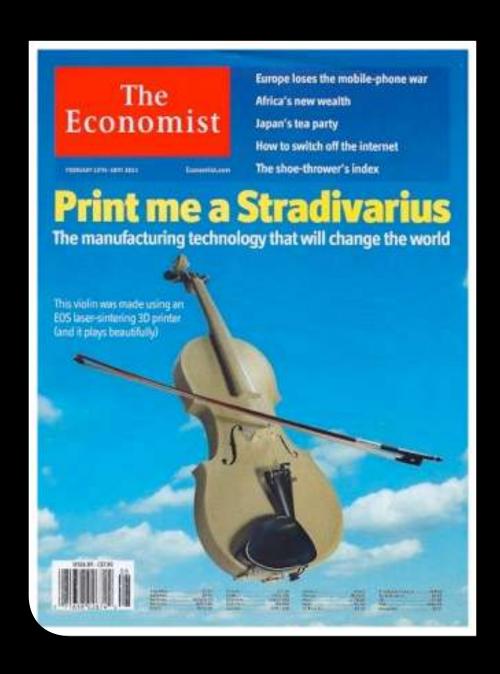


...Produciendo **progreso** en todas las áreas del conocimiento

RUPTURA Social Política Financiera

ABUNDANCIA

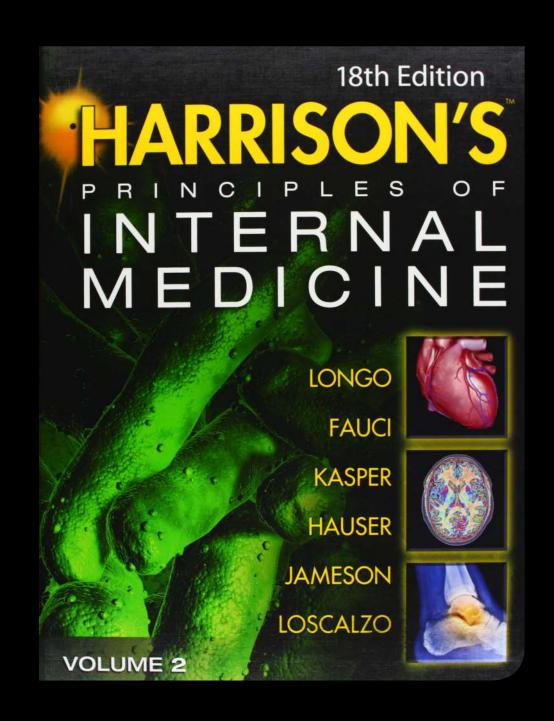
#### Noticias recientes...

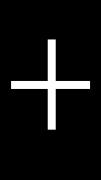








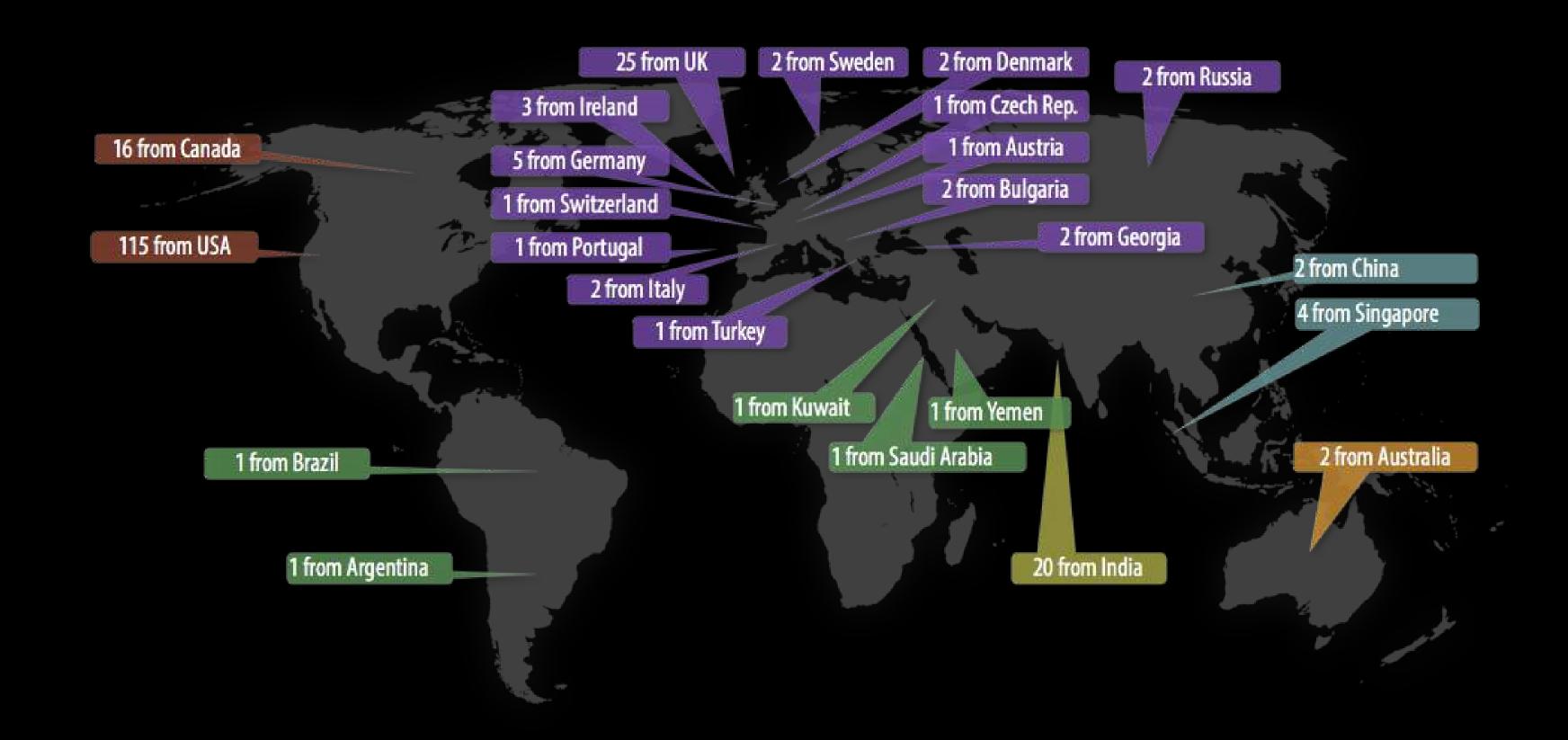








# QUALCOMMATRICORDER YPRIZE Distribution



**■** XPRIZE

**ABOUT** 

**NEWS** 

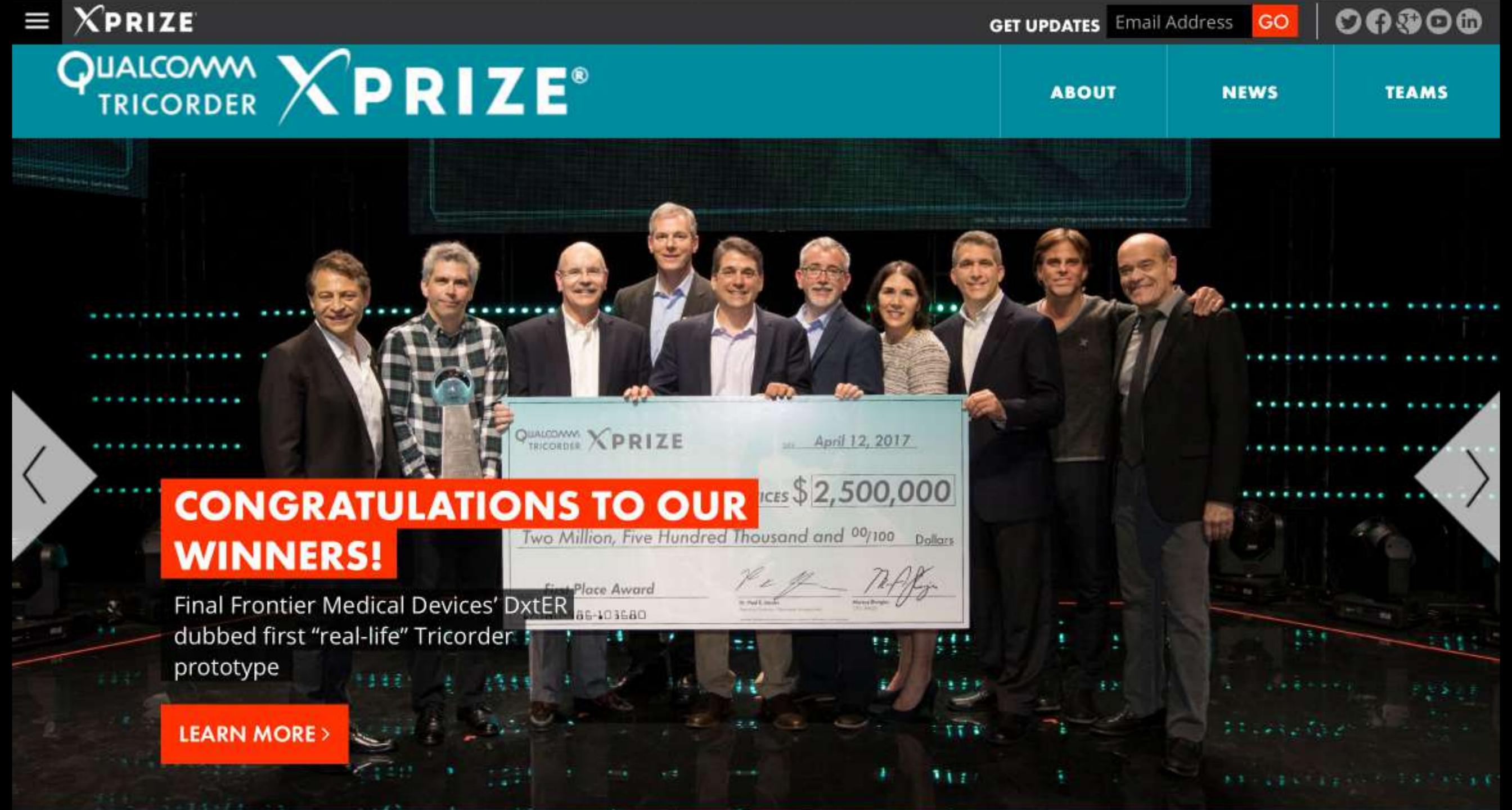
TEAMS



Winner to be announced in Q2, 2017.

LEARN MORE>

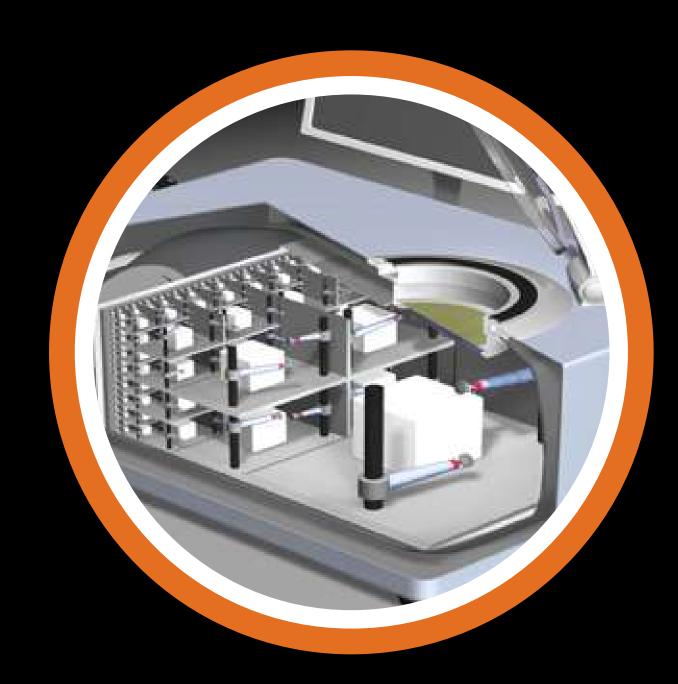




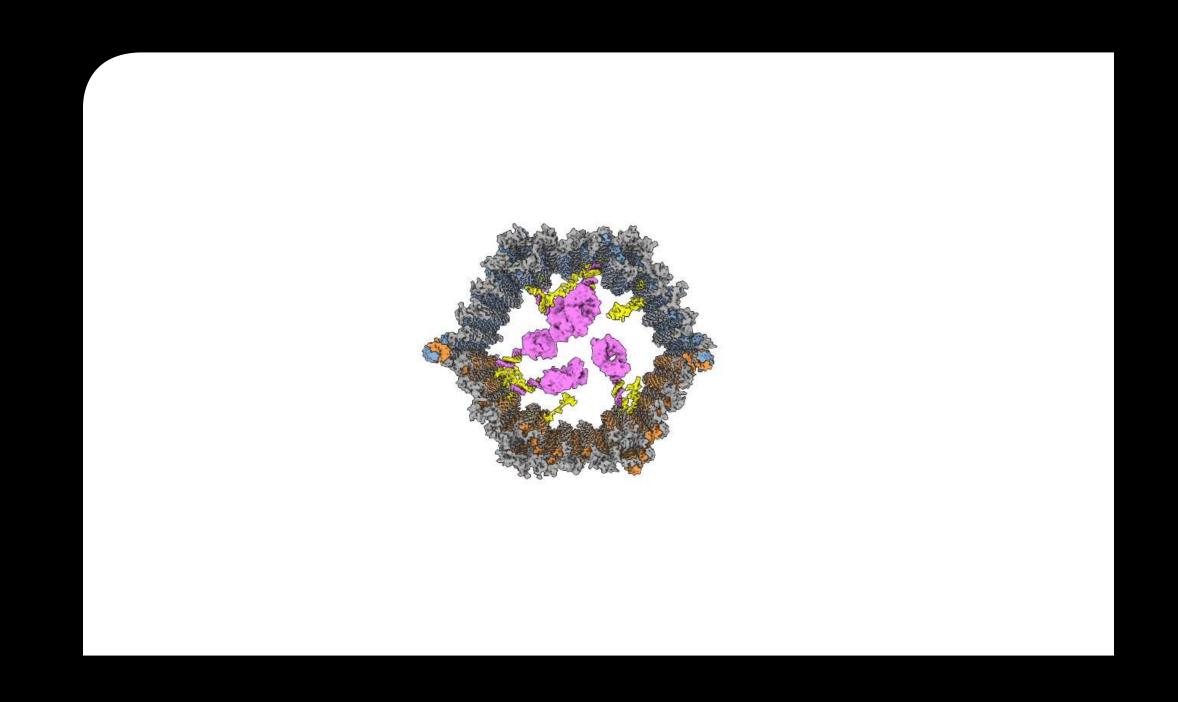
#### Nanotecnología

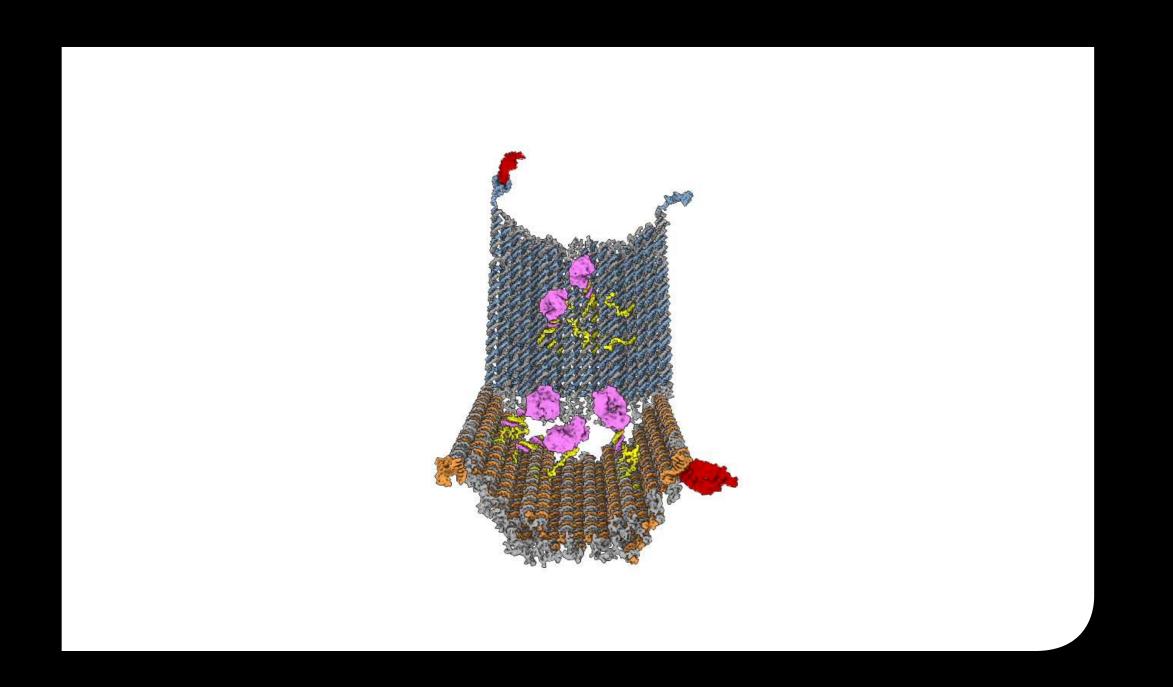




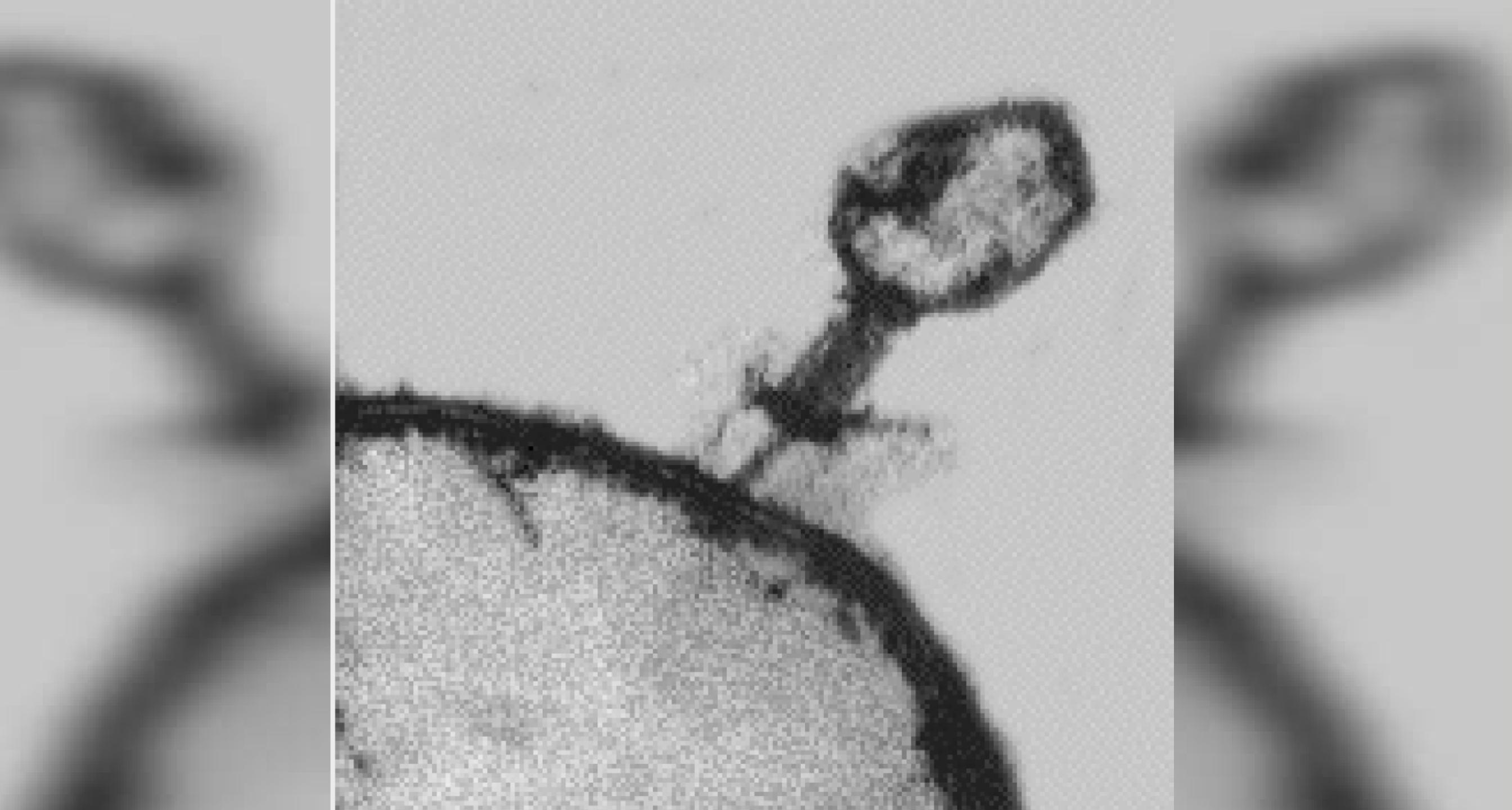


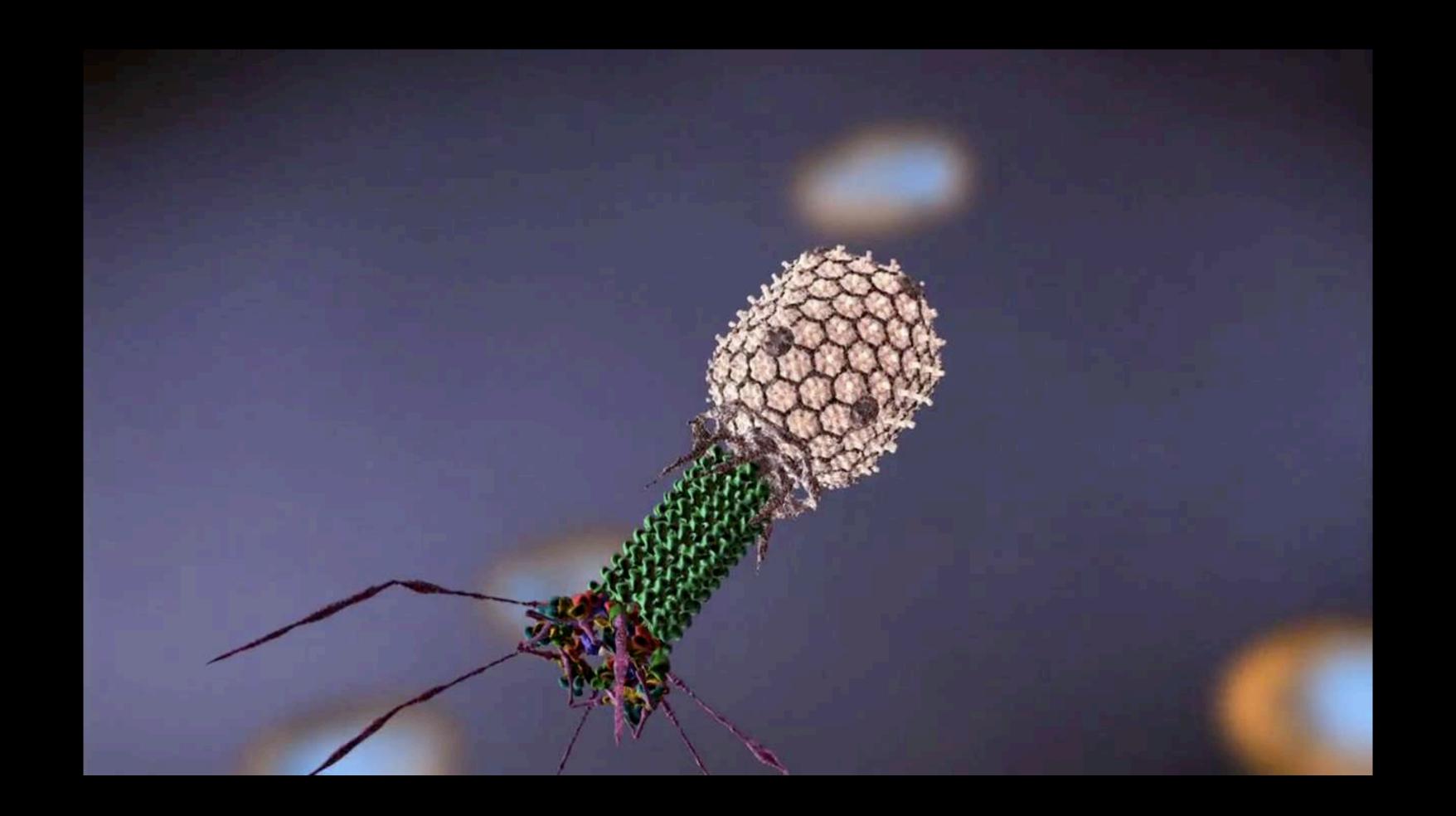
#### Virología\_Sintética





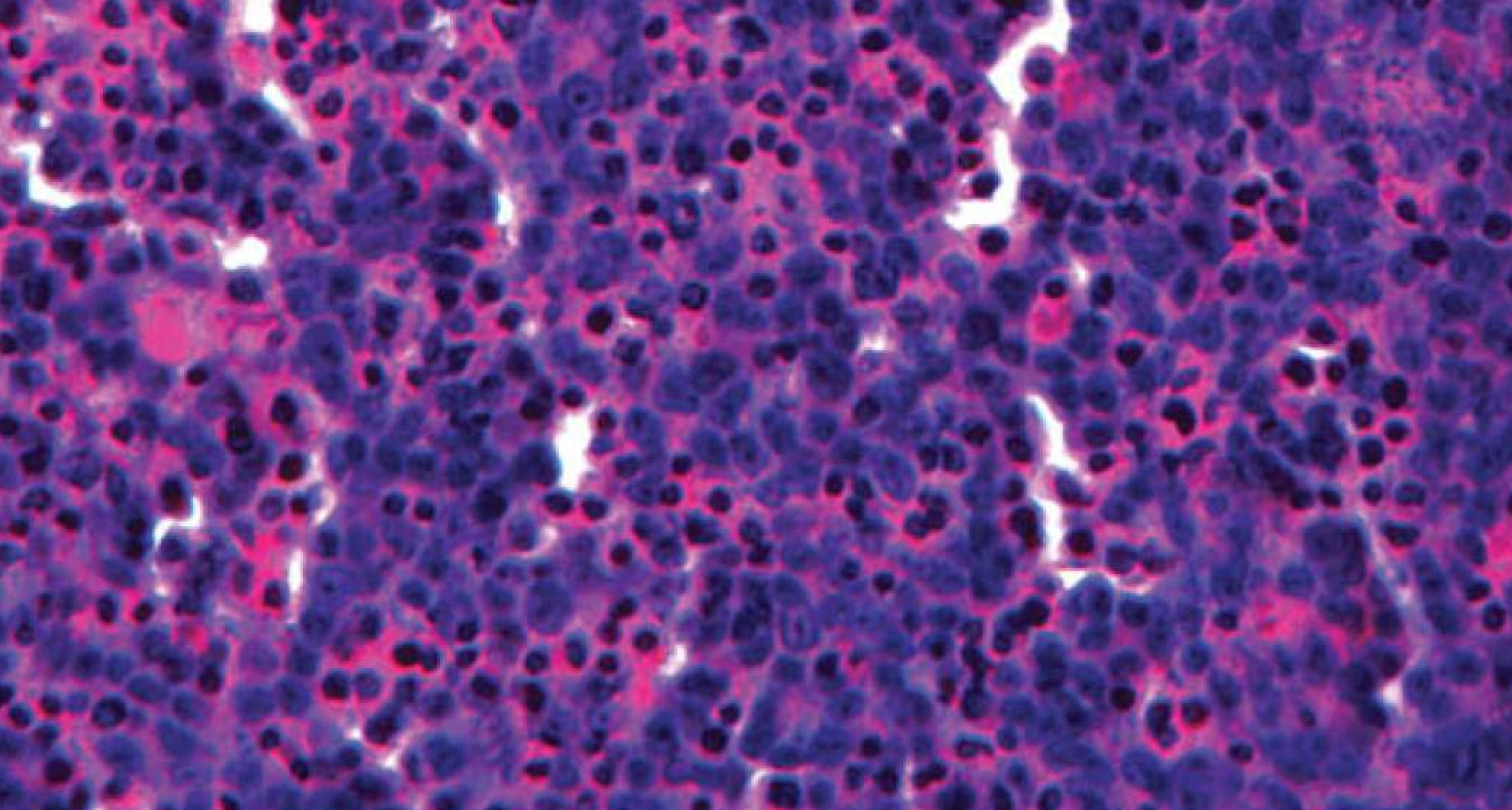
Shawn M. Douglas, Ido Bachelet, George M. Church, A Logic-Gated Nanorobot for Targeted Transport of Molecular Pavloads, Science 2012

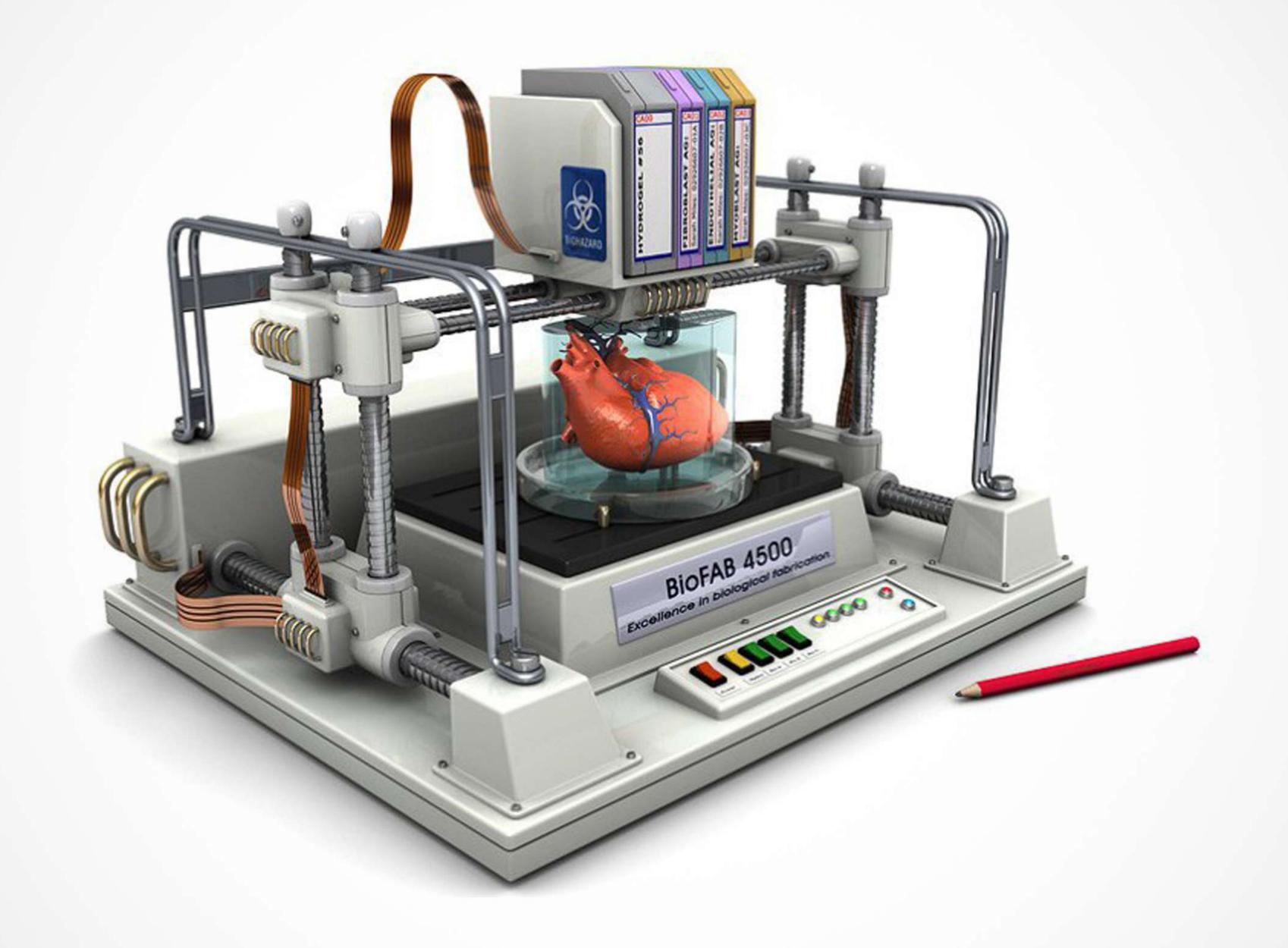


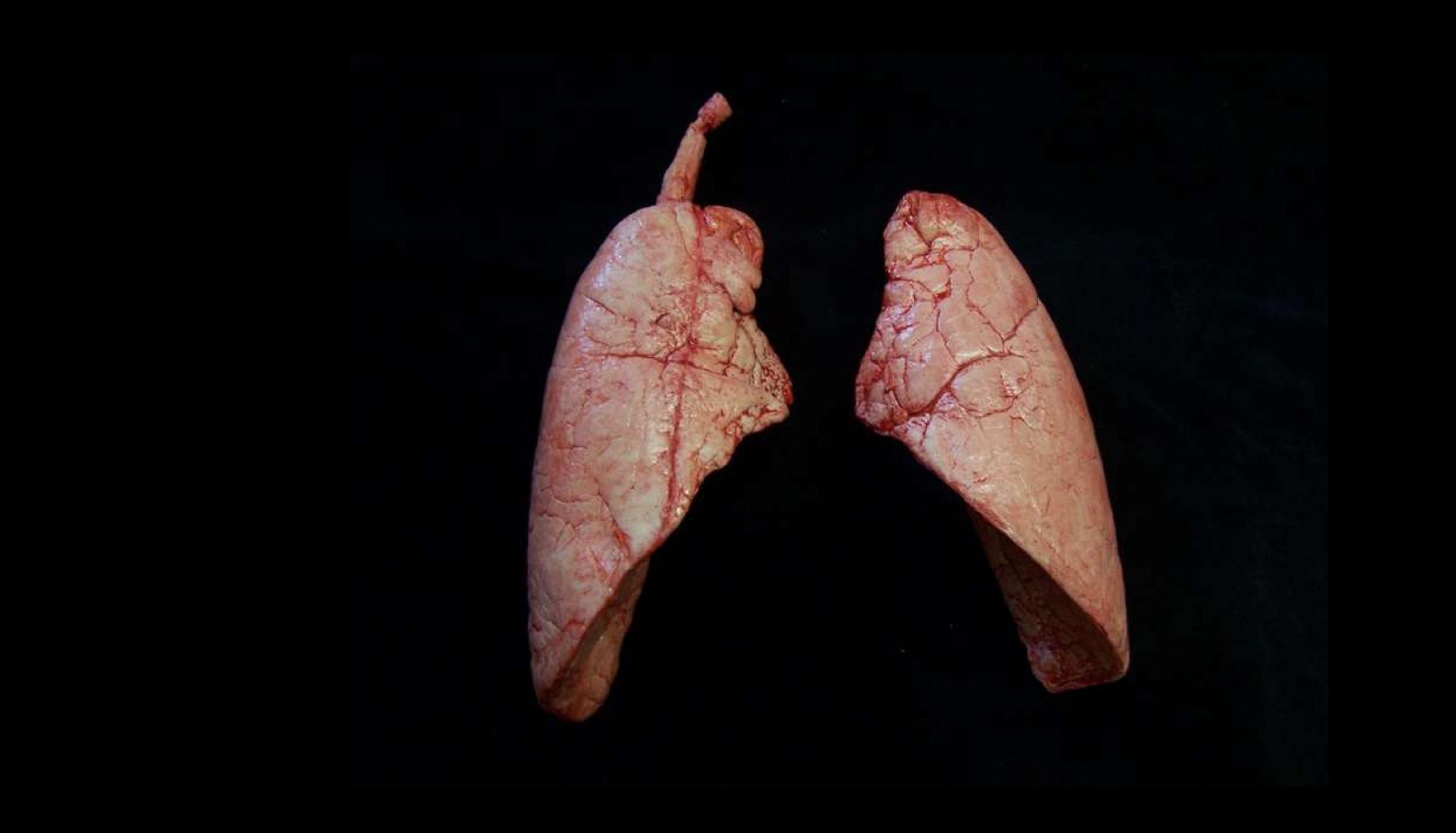




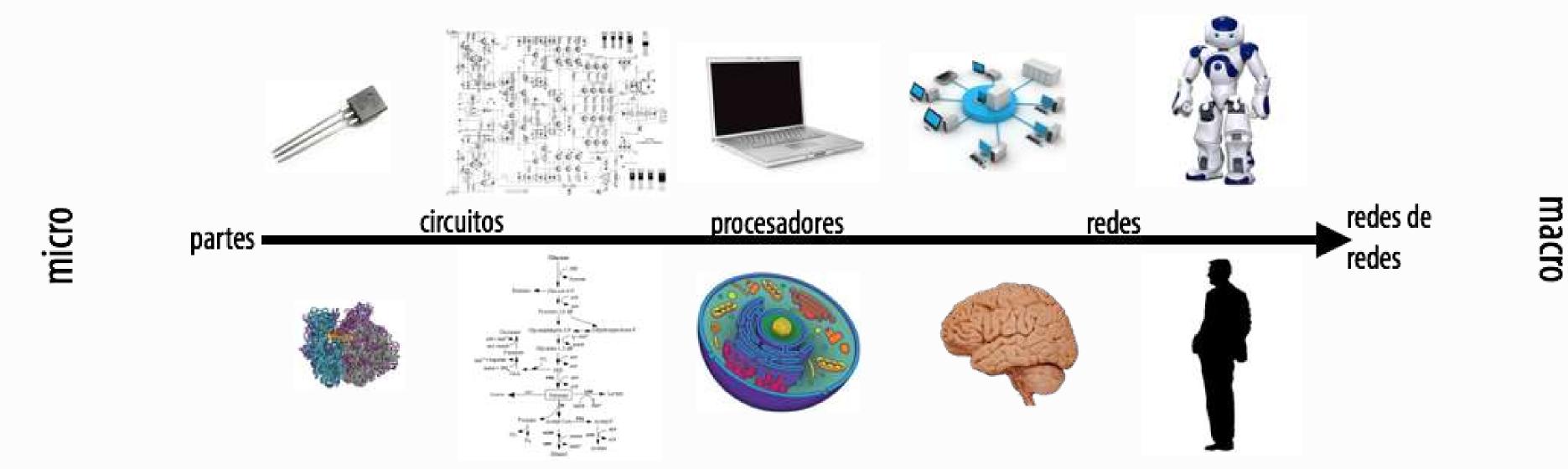






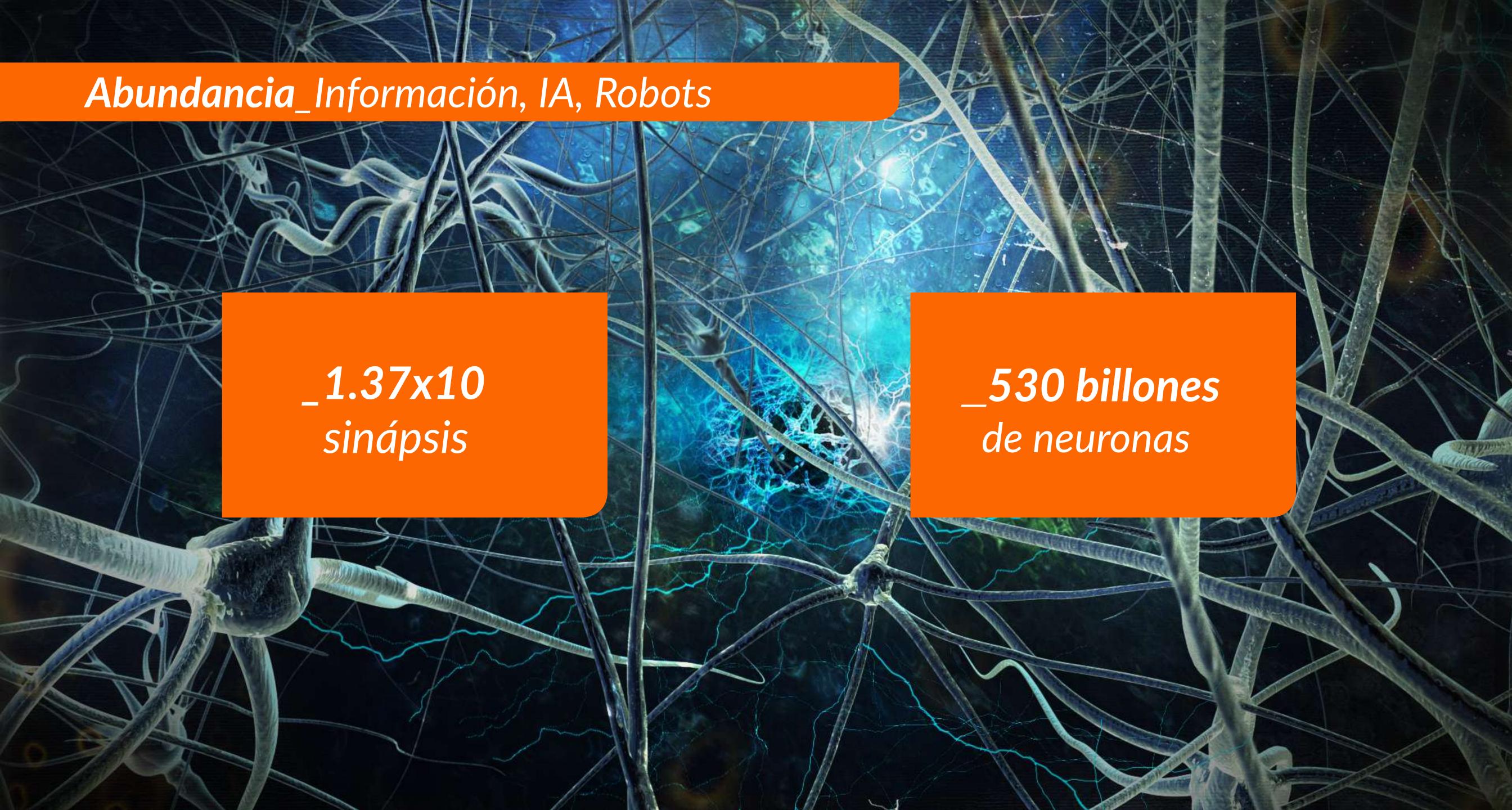


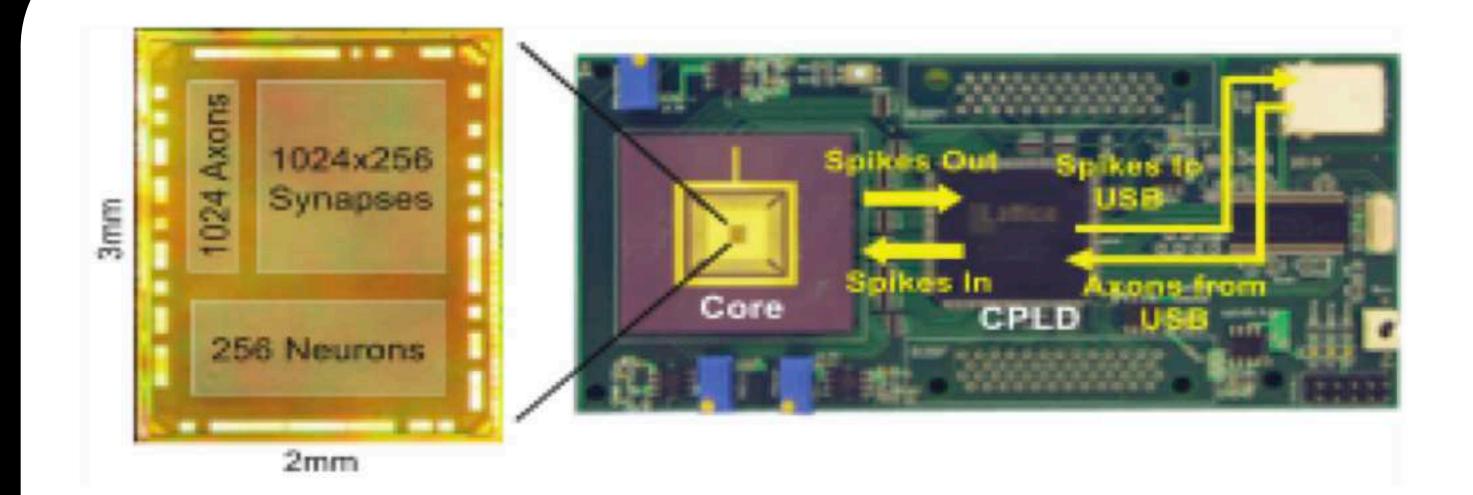
no-vivo



at gtt gt gc at cg cc ag t category at c



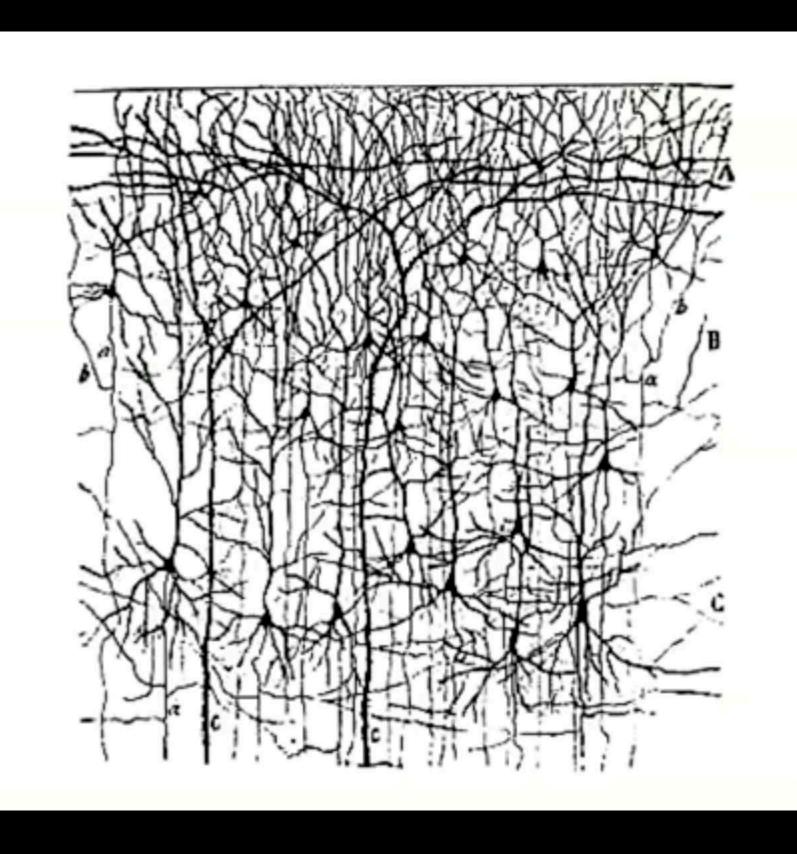


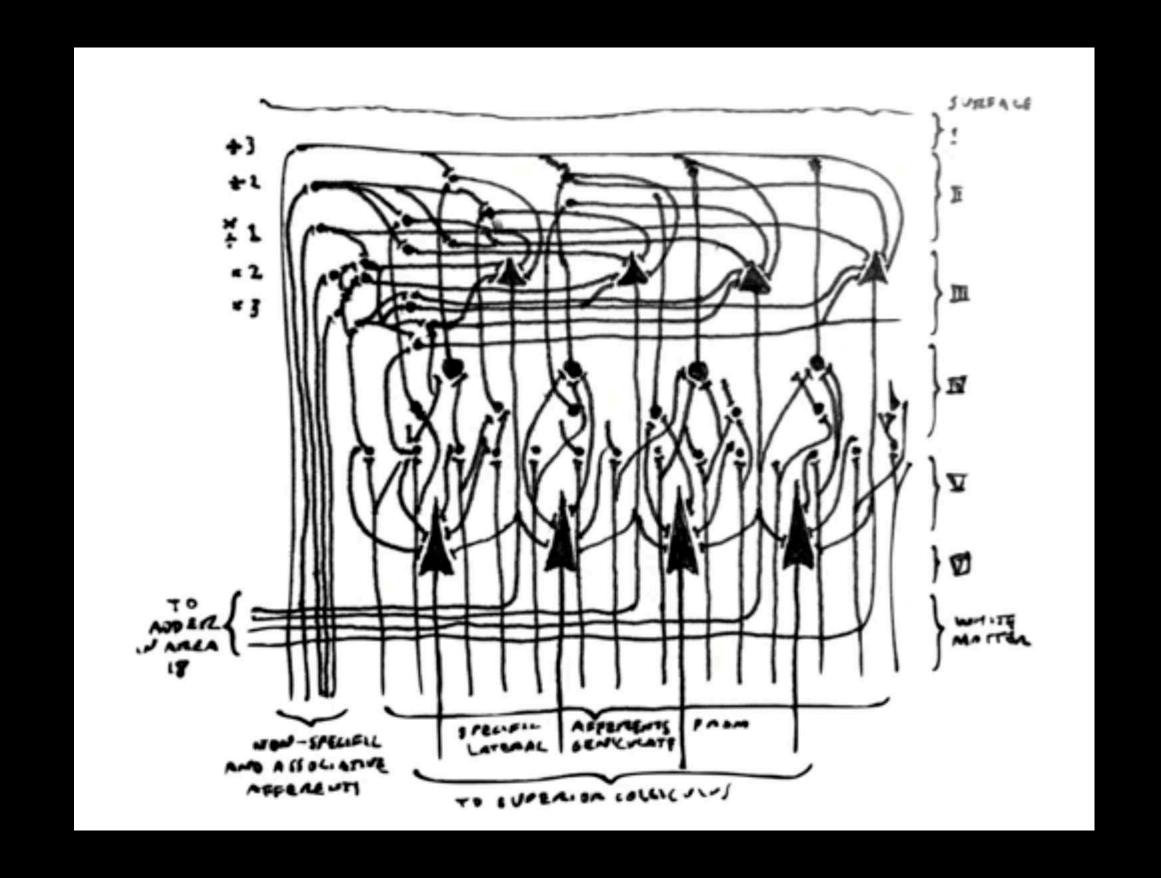


## Santiago Ramón y Cajal, 1852-1934



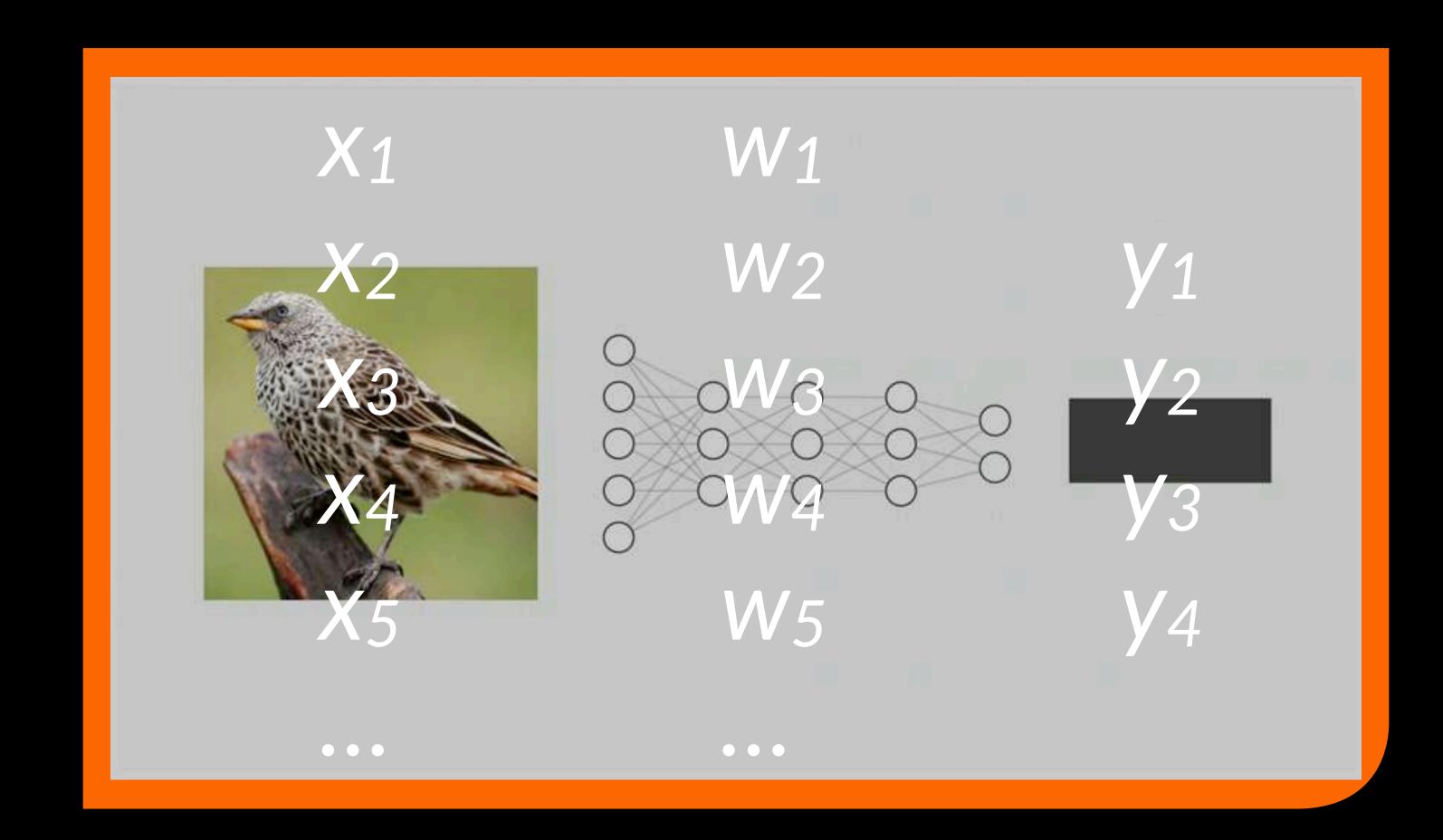






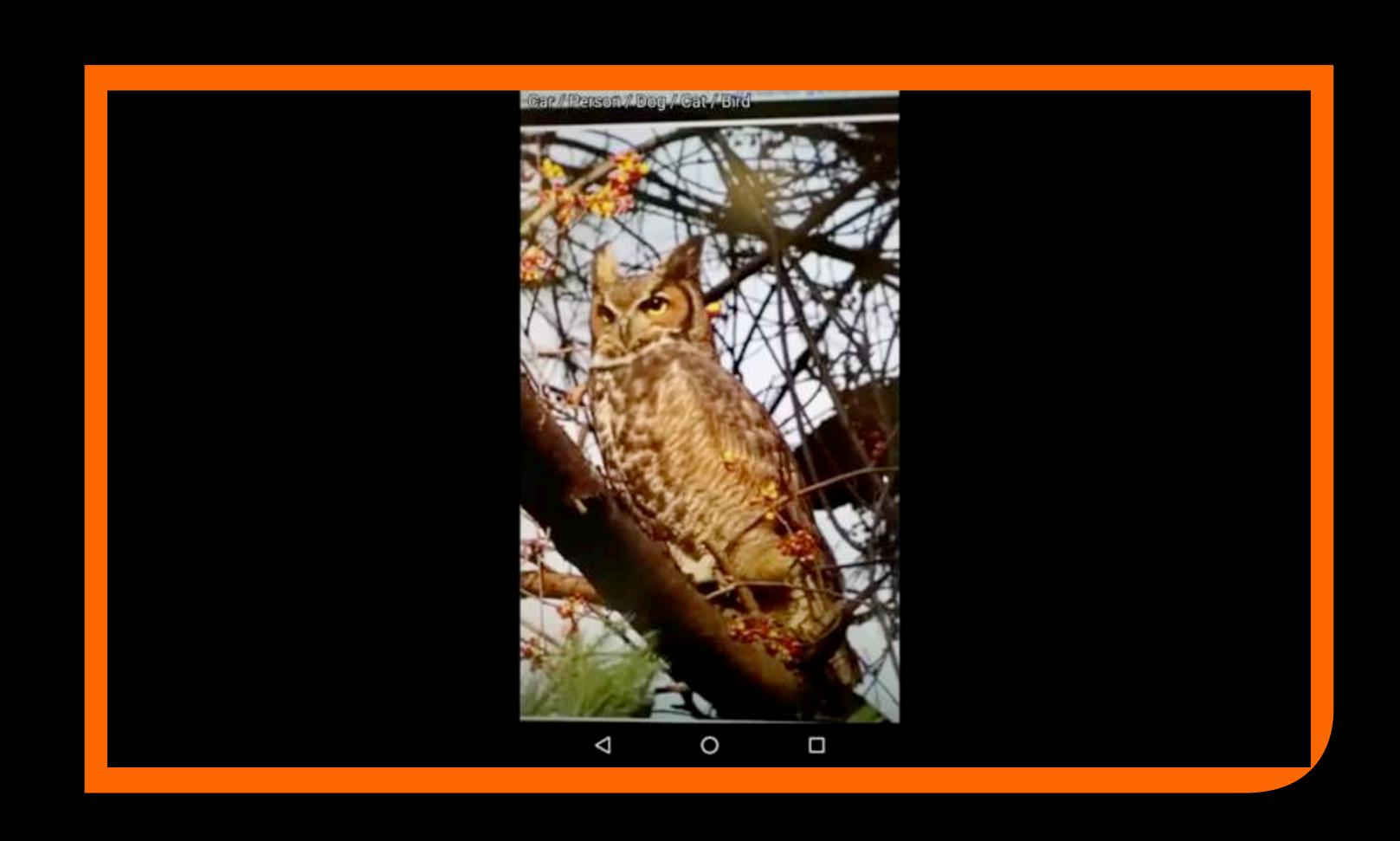
Ramón y Cajal, 1900

McCulloch & Pitts, 1947



# Error= X"X"W-Y

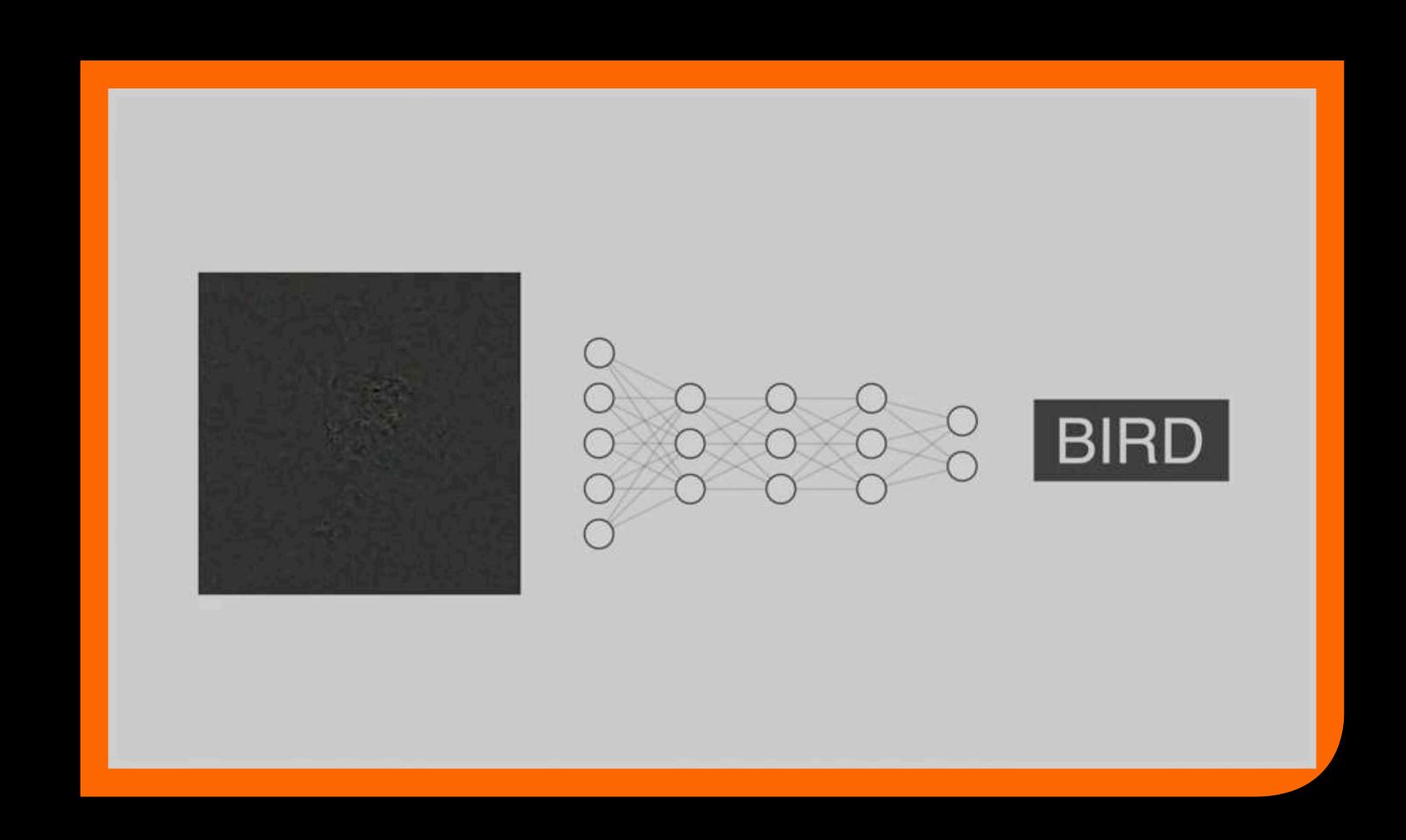
## El proceso de aprendizaje... ¿suena conocido?



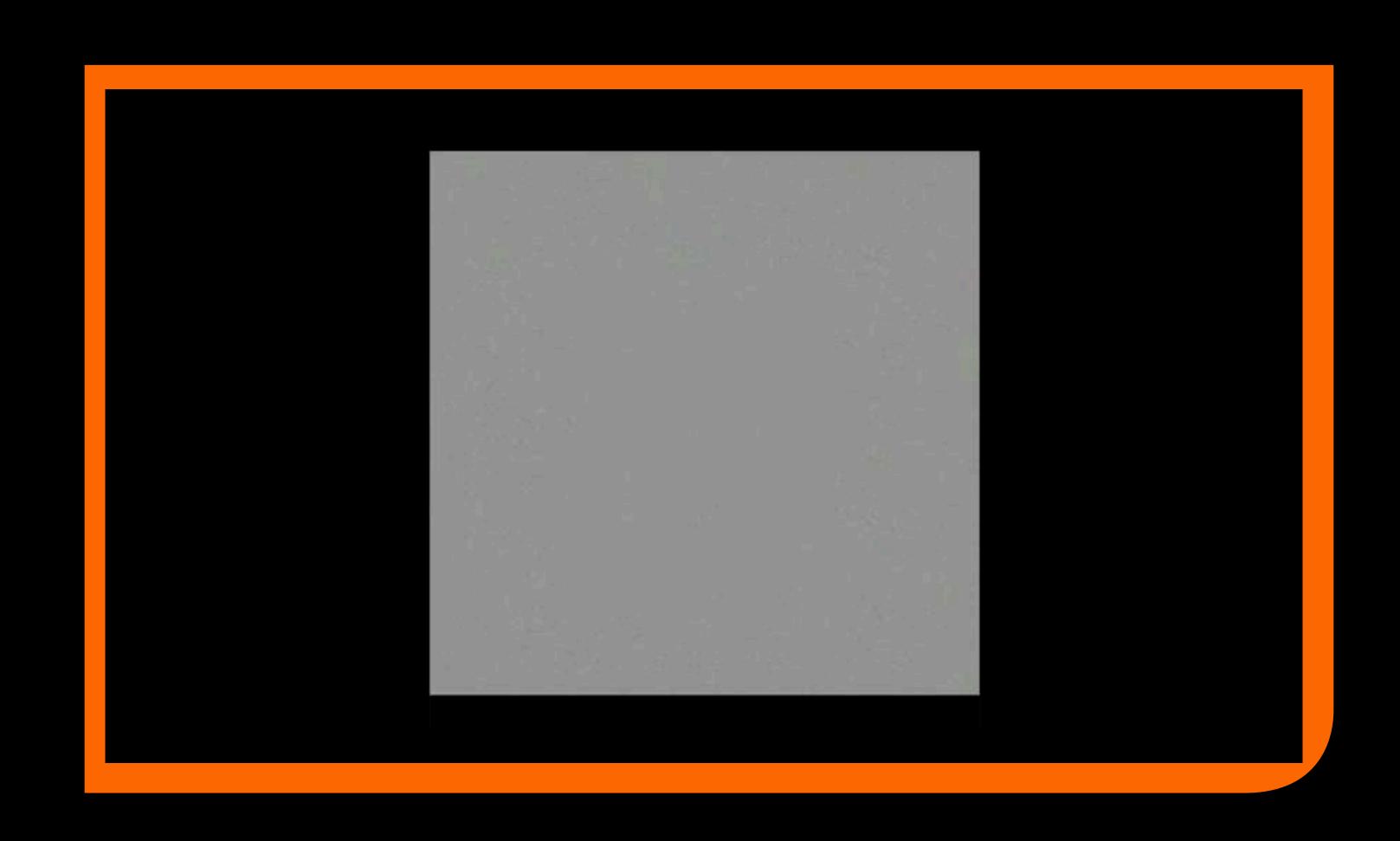
## Creatividad Artificial (AC)



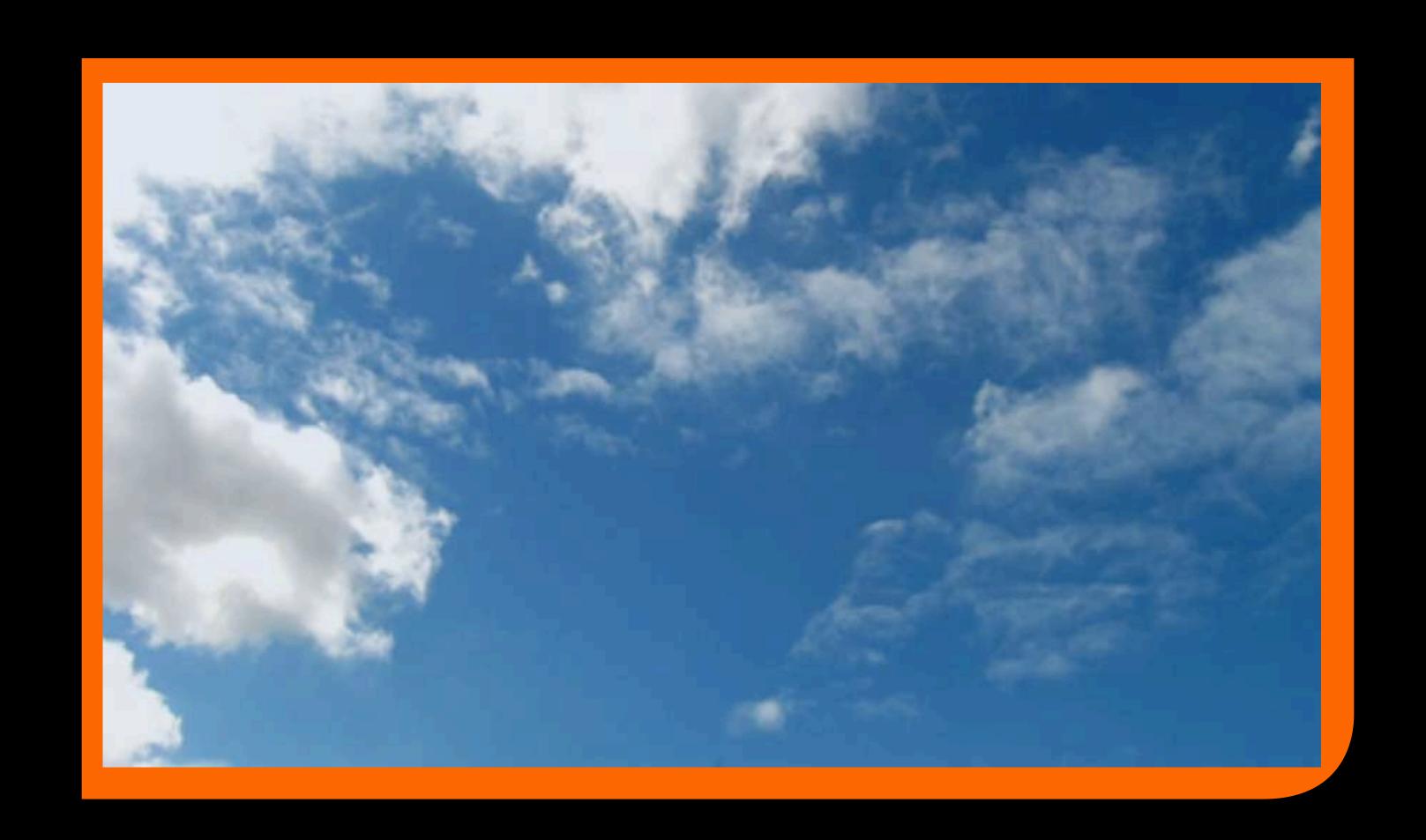
## Creatividad Artificial (AC)



## Creatividad Artificial (AC)



## AC: Asociación Libre

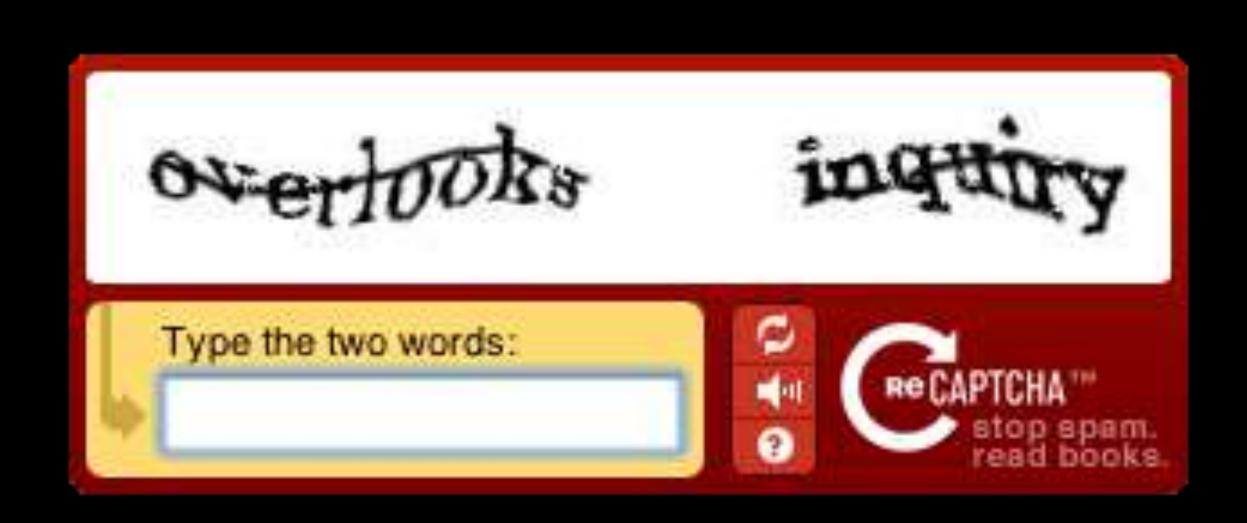


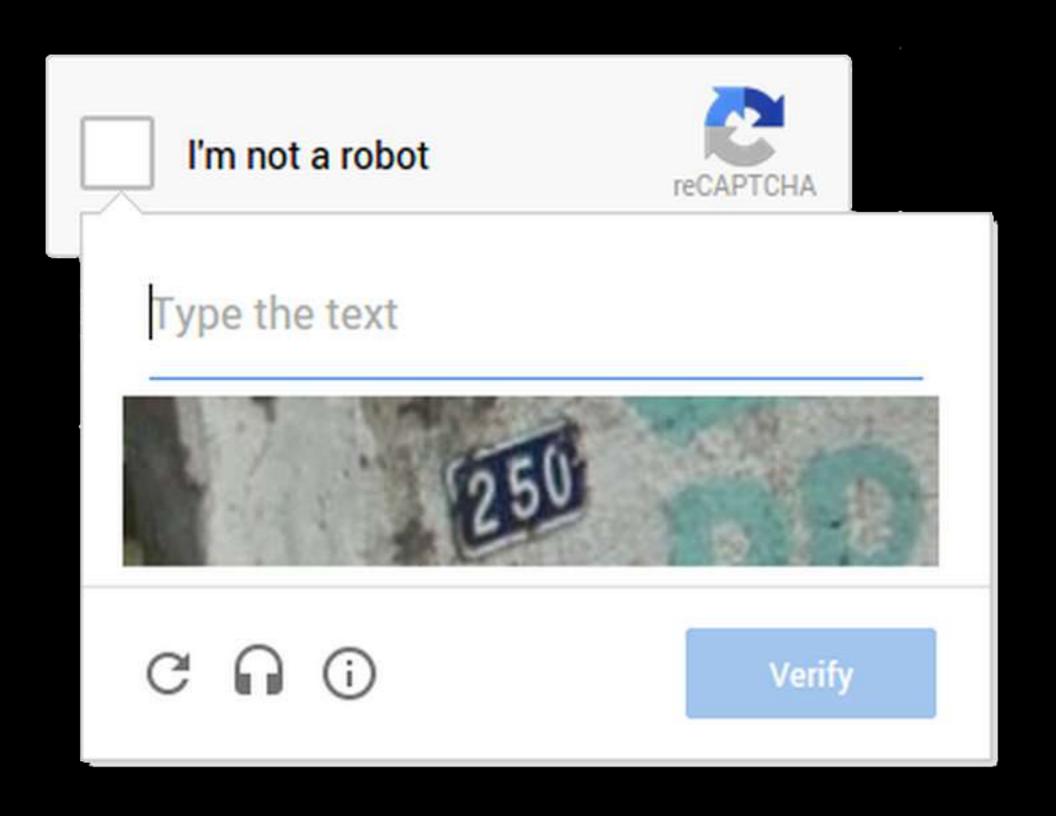
## ¿Qué significa todo esto?

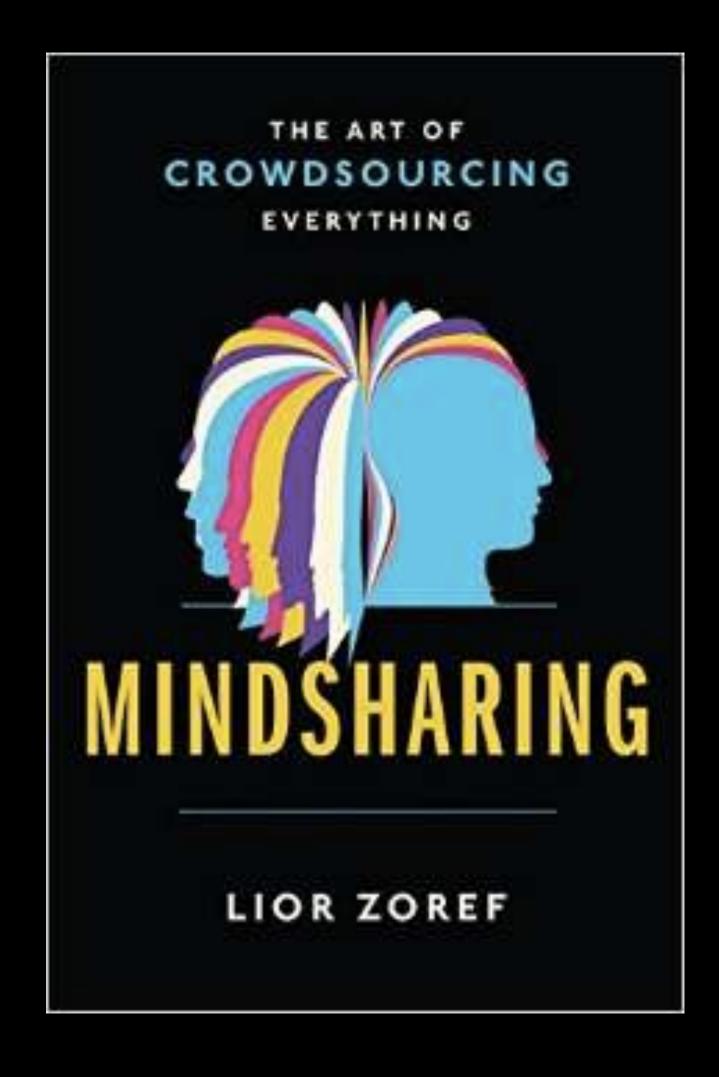


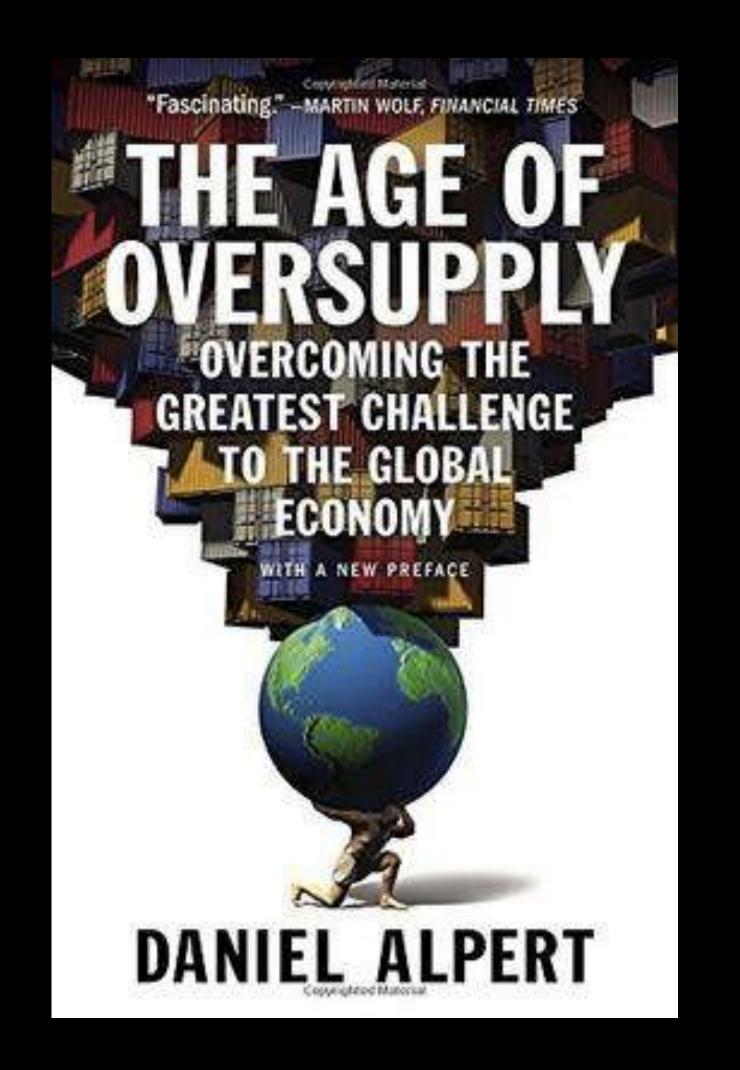


## 280MM de reCAPTCHAS al día, que equivalen a 233,332 HH's dedicadas a digitalizar el mundo CADA día











### Crowdsourcing Industry Landscape





GALAXY ZOO ChaCha

OpenBuildings in CureTogether WiReport Treddit



### Collective Knowledge

Development of knowledge assets or information resources from a distributed pool of contributors.



### **Collective Creativity**

Tapping of creative talent pools to design and develop original art, media or content.



### **Community Building**

Development of communities through active engagement of individuals who share common passions, beliefs or interests.



### **Open Innovation**

Use of sources outside of the entity or group to generate, develop and implement ideas.



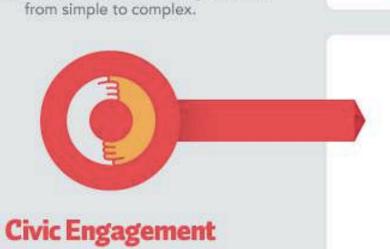
agasauris mediapiston











Collective actions that address issues of public concern.

**Cloud Labor** 

Leveraging of a distributed virtual labor pool,

available on-demand to fulfill a range of tasks



clickworker





yet com mutopo chaordix deasculture metal 2.0



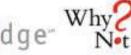


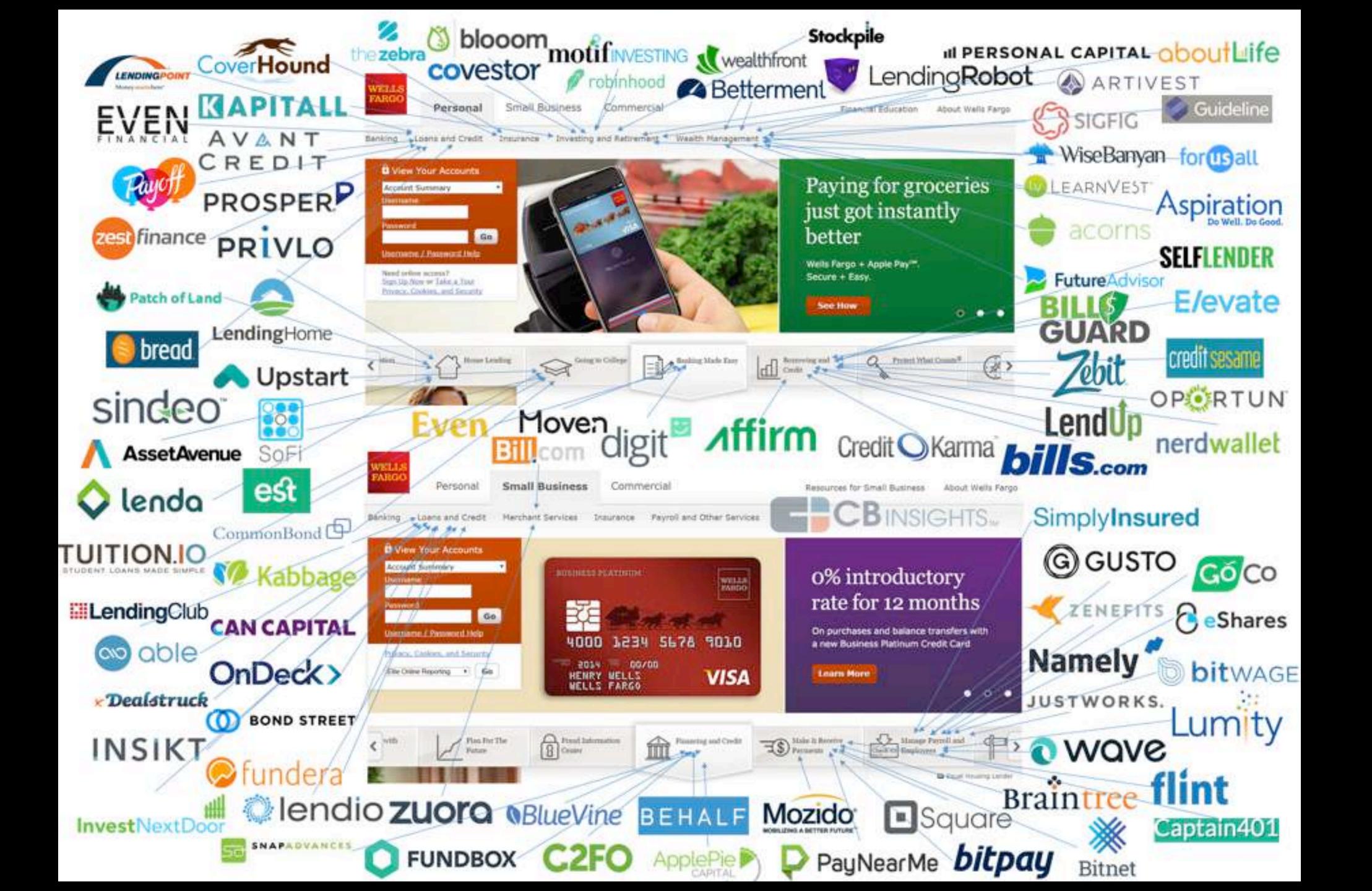




nnovationexchange







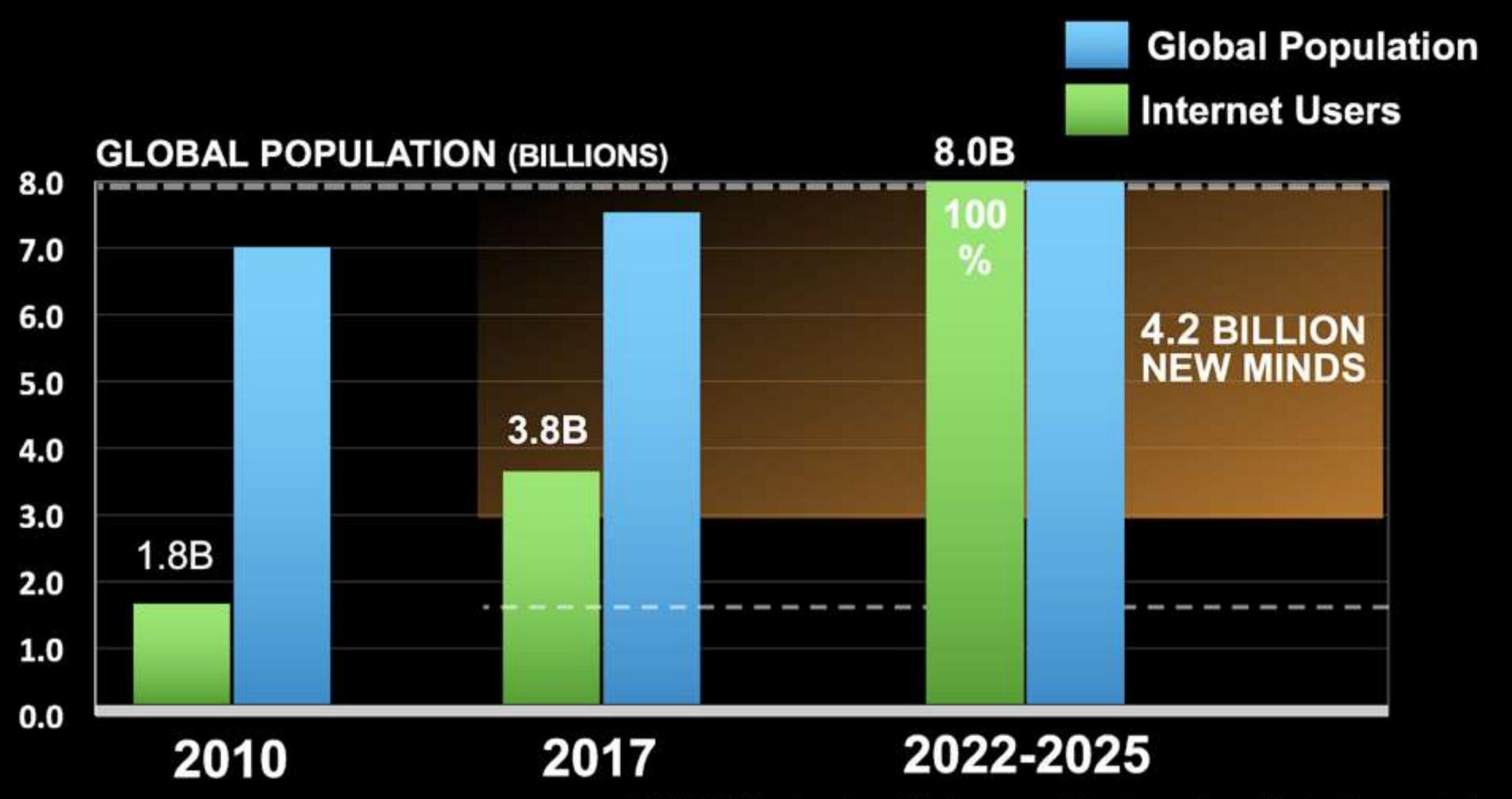
## Colaboración v/s Coordinación



## Colaboración v/s Coordinación



### Reflexión Final\_Los nuevos billones

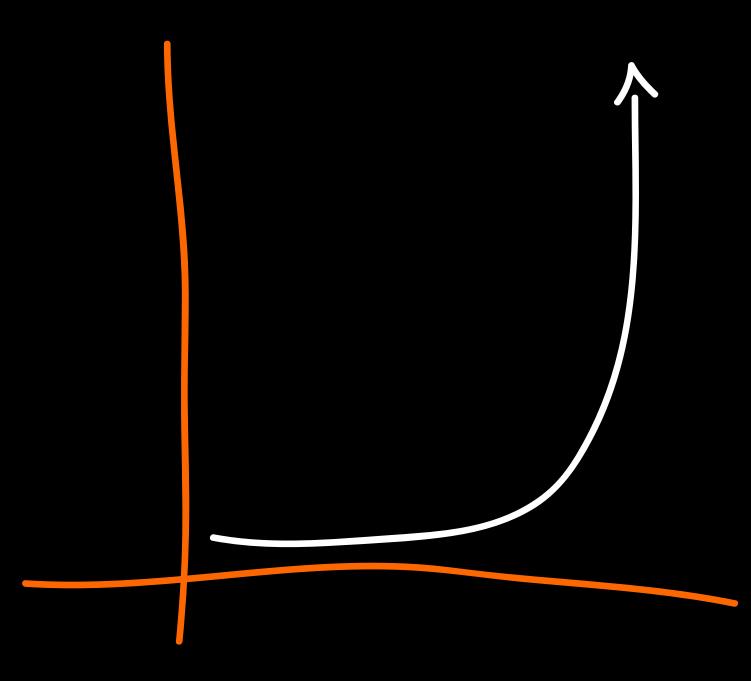


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### 4.2 billones de nuevas mentes van a\_



El mejor período para la Innovación...; hasta ahora!



Cuando vean esta curva\_

## MUCHAS GRACIAS

T R A D E S I A