

HEADLINER

AI in Healthcare. What's new?



Mona Flores

Global Head of Medical AI, **Nvidia**



AI in Healthcare. What's new?

Mona Flores, MD, MS,MBA, FACS | Global Head of Medical AI, NVIDIA | Intelligent Health, 2023

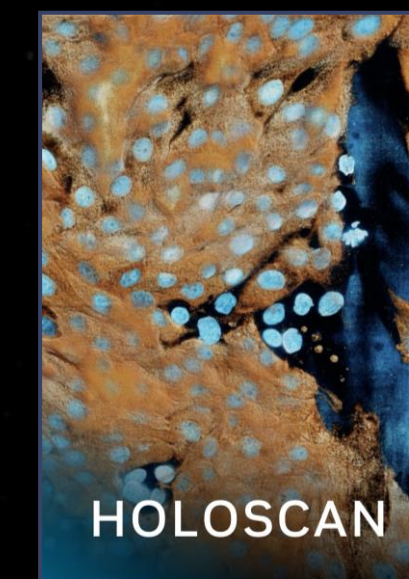
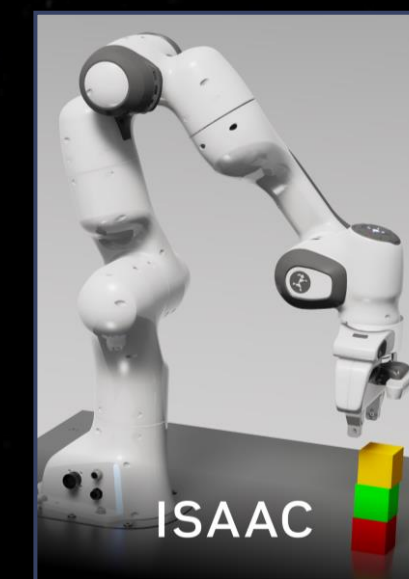
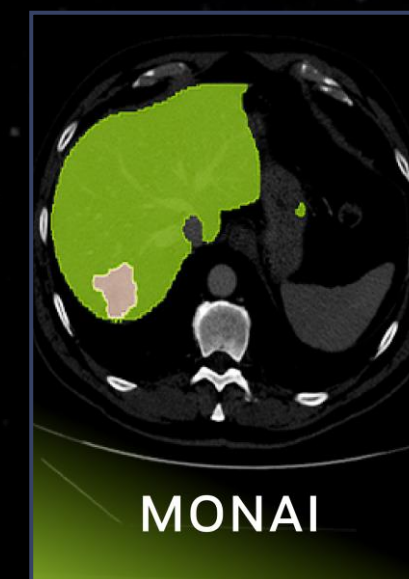
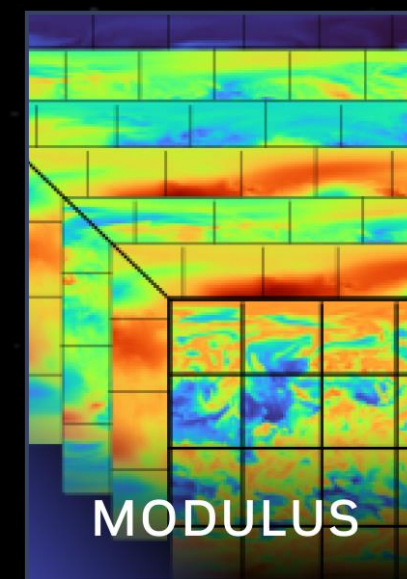
A detailed 3D molecular simulation visualization. A large, complex protein structure is shown in the foreground, rendered with a red ribbon and a white surface. The protein is surrounded by a dense cloud of blue and white spheres, representing a solvent or a reaction environment. In the background, other molecular structures are visible, including a green one at the top and a red one on the right. The overall scene is set against a dark, gradient background.

NVIDIA Supercharges Healthcare

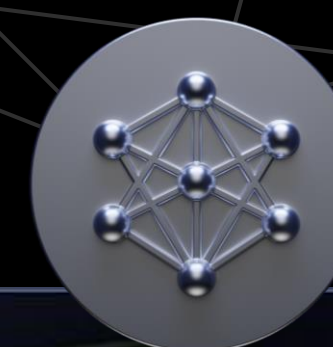
Pioneering Accelerated Computing

Accelerated computing requires full-stack optimization, from chip architecture, systems, and acceleration libraries, to refactoring the applications. The global NVIDIA ecosystem spans 4 million developers, 40,000 companies, and over 3,000 applications.

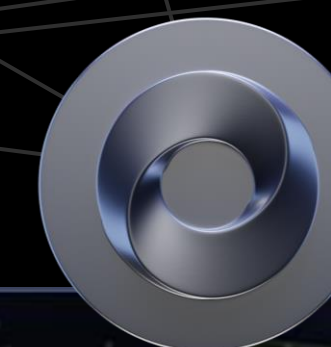
Application
Frameworks



Platform



NVIDIA
AI

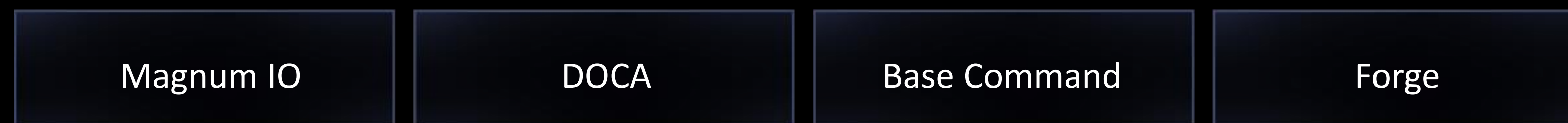


NVIDIA Omniverse

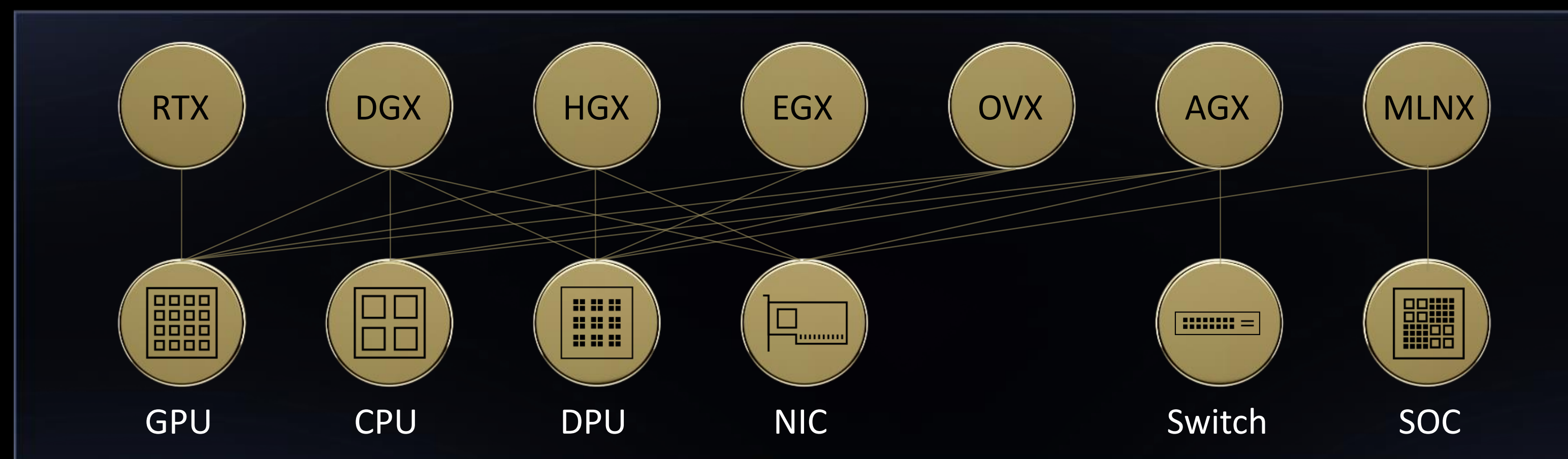
Acceleration
Libraries



System
Software



Hardware



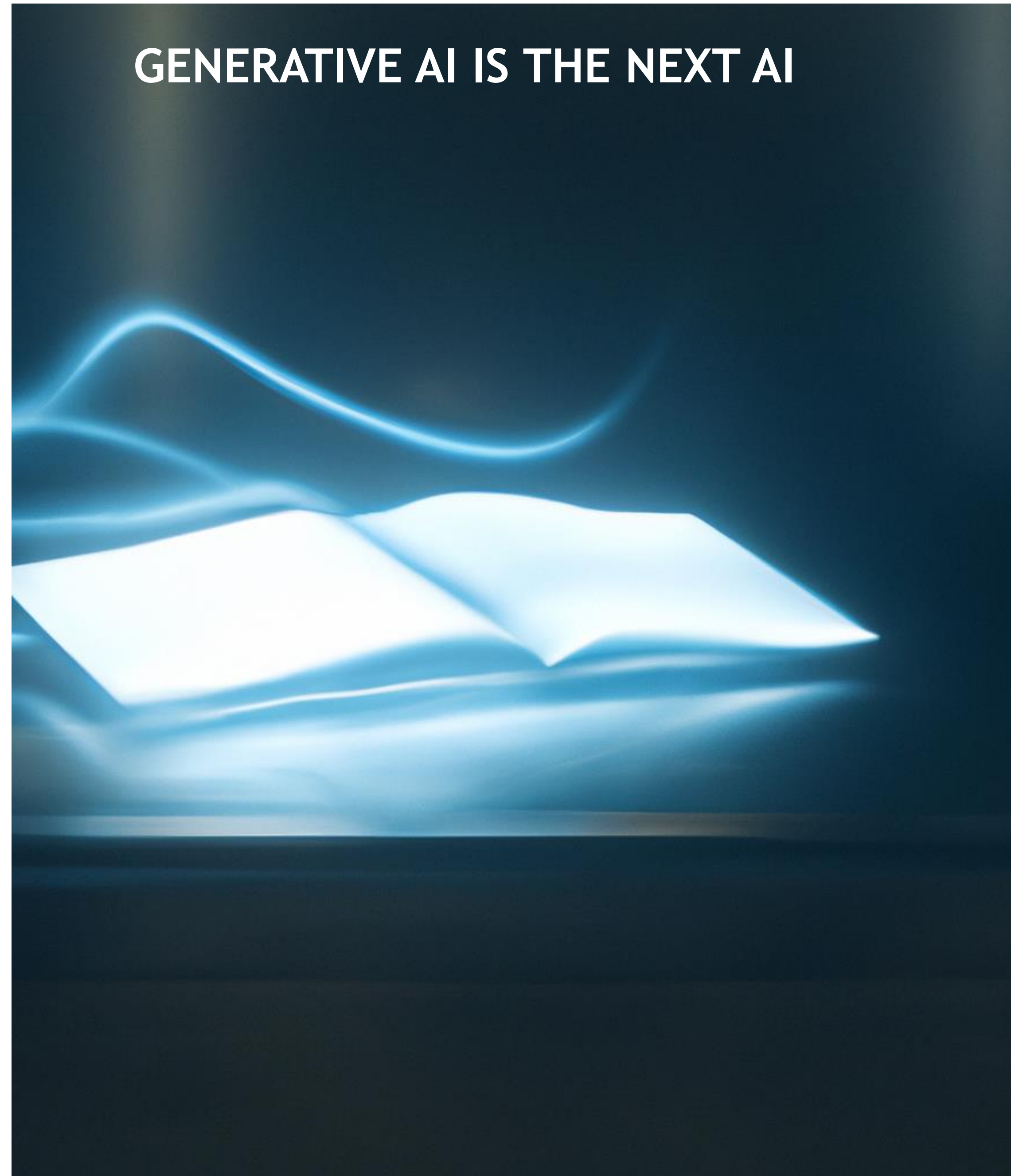
AI in Healthcare

Key points

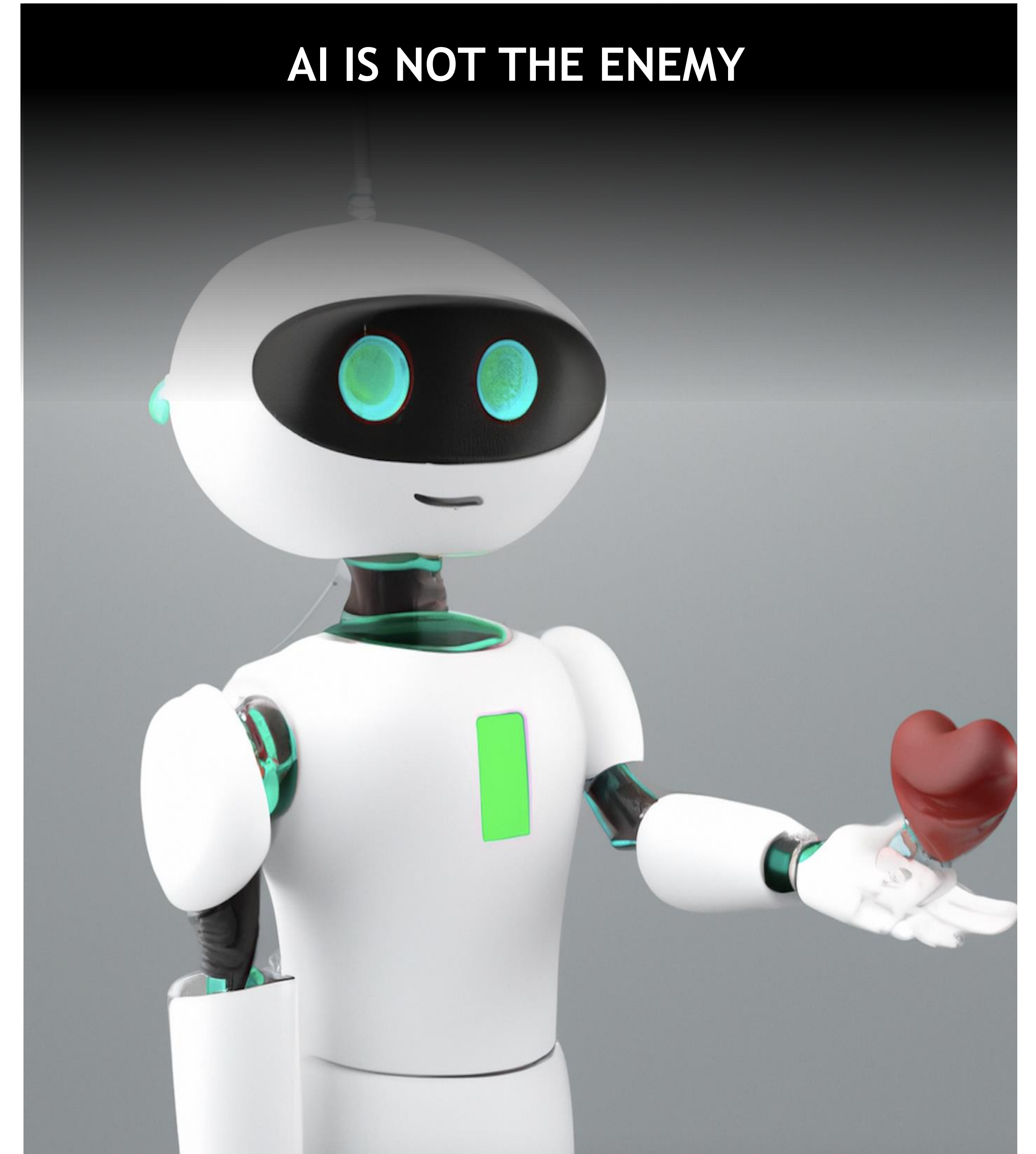
AI IS EVERYWHERE



GENERATIVE AI IS THE NEXT AI



AI IS NOT THE ENEMY



Artificial Intelligence is Everywhere

Touching All of Us



Accident?



Irregular Heart Beat?



Biopsy?



Surgery?



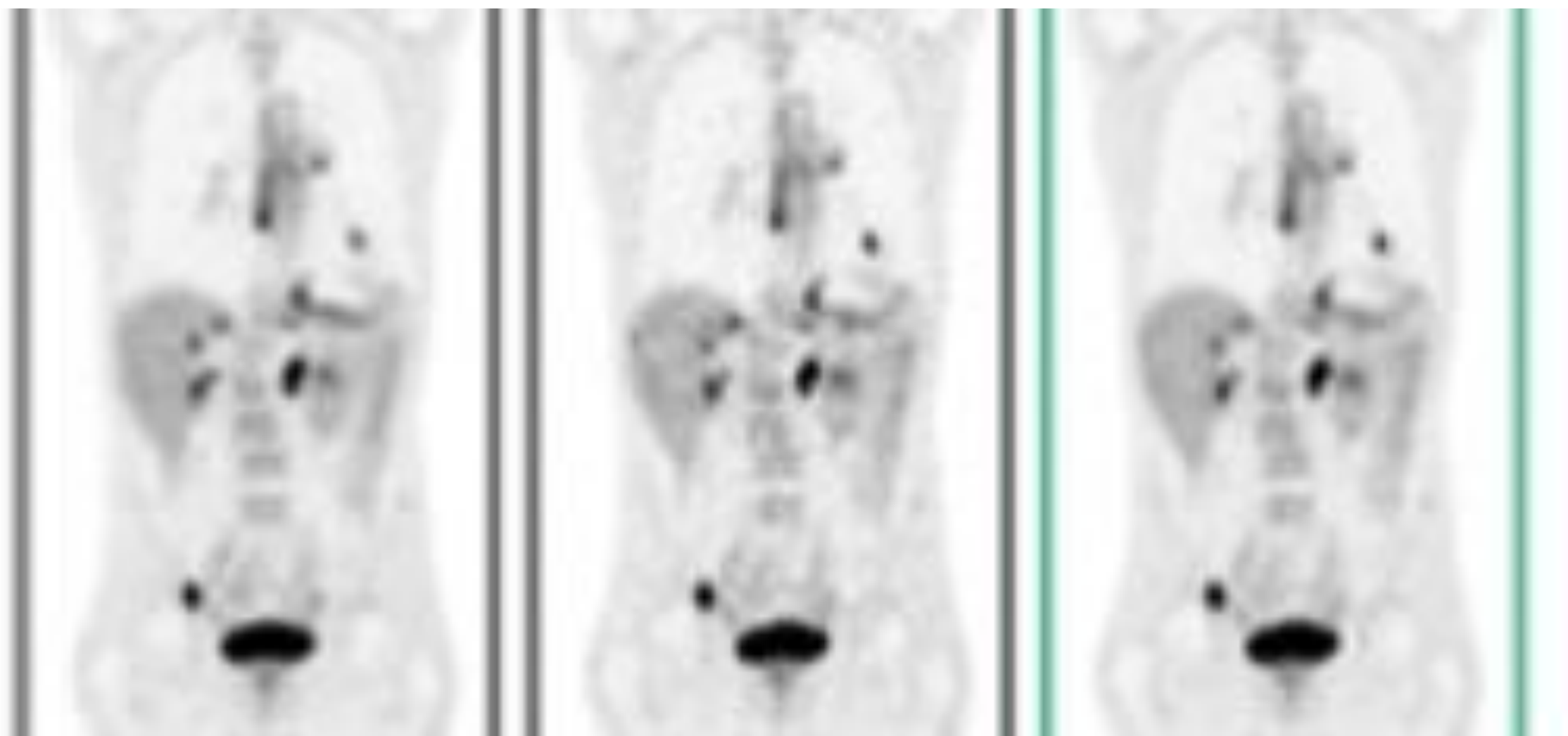
Chest Pain?



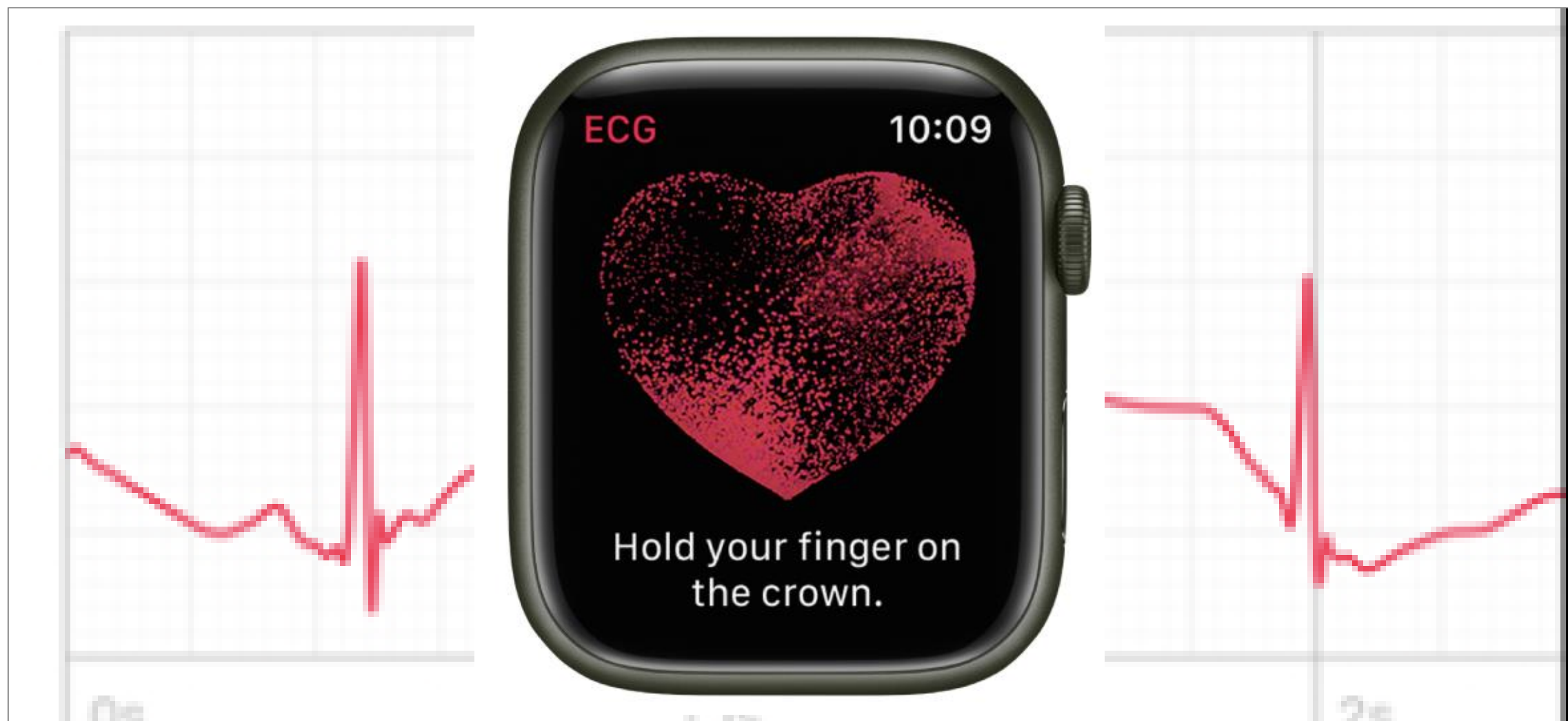
Medicine?

Artificial Intelligence In Clinical Care

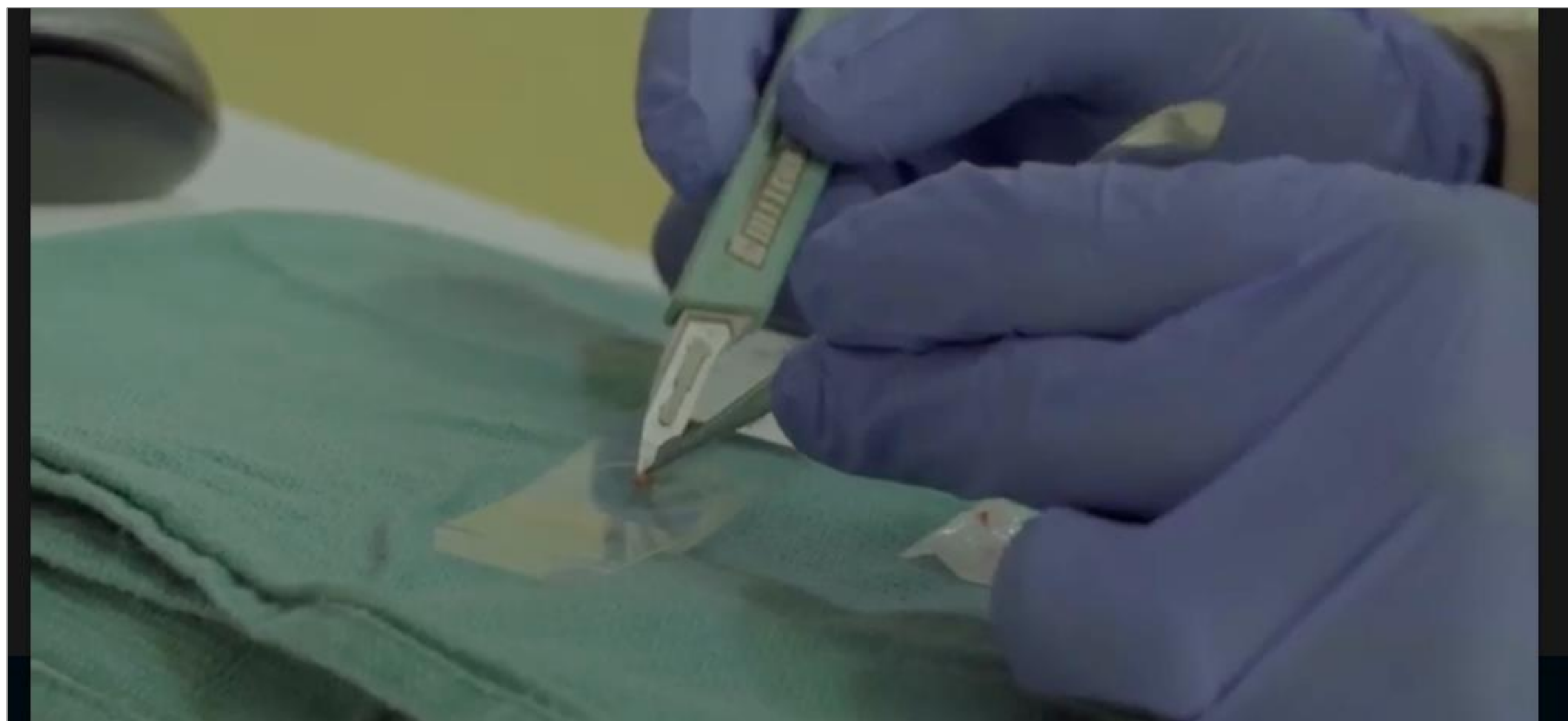
From Diagnostics to Therapeutics



Comfort/Safety
Subtle Medical



Diagnostics
Apple



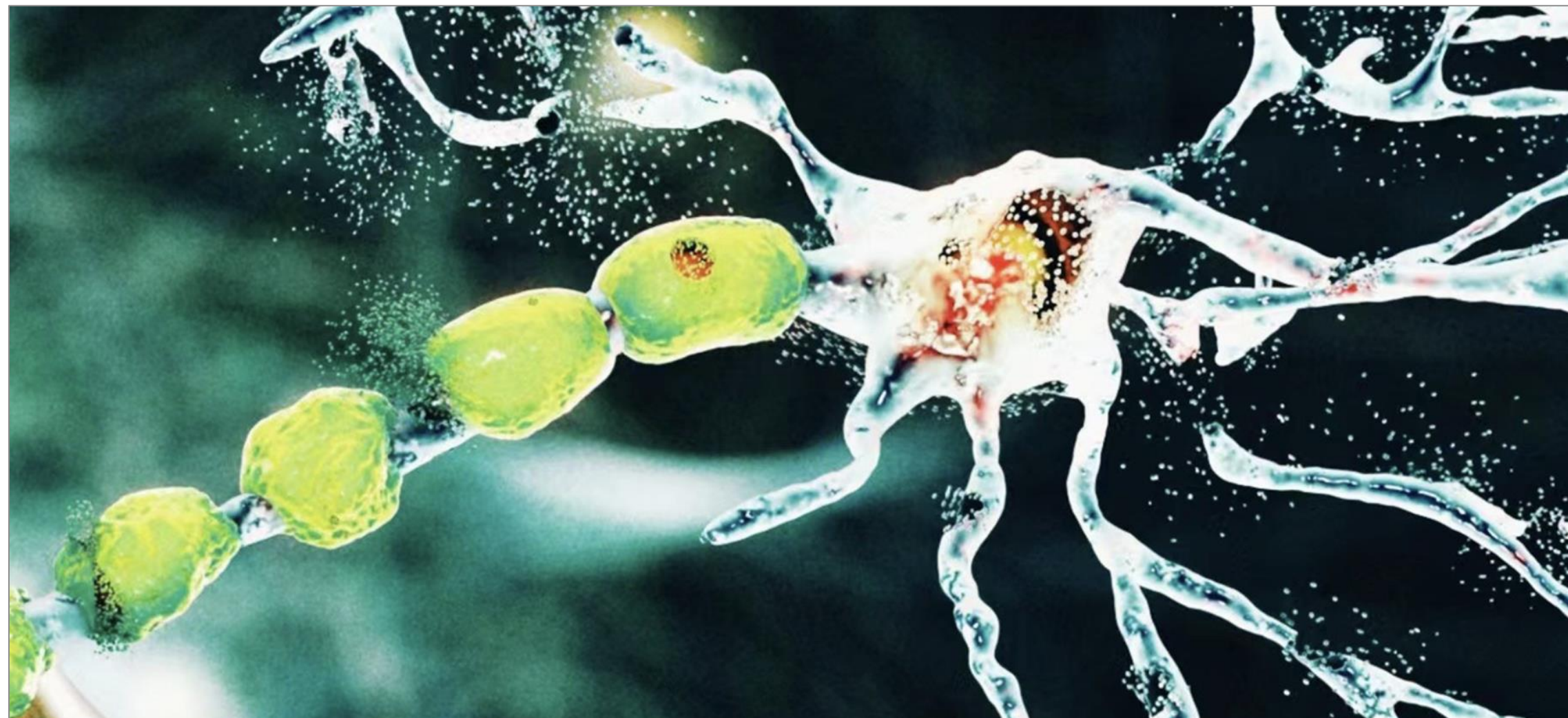
Insight
Invenio



Access
Proximie



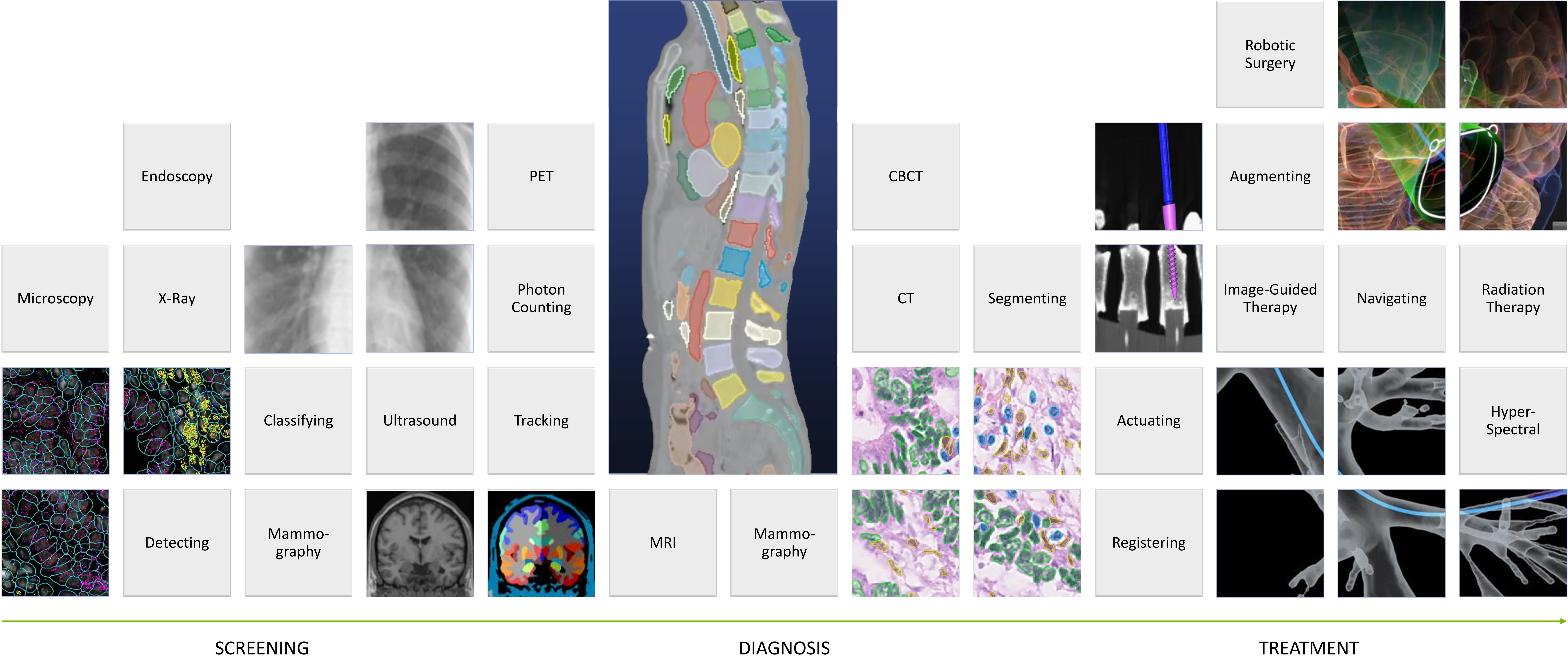
Decision Support
HeartFlow



Therapeutics
InSiico

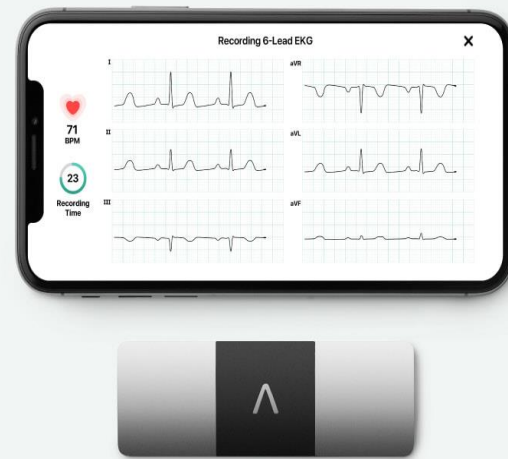
Medical Imaging is Essential to Healthcare Delivery

90% of Healthcare Data



A SMART
MEDICAL DEVICE REVOLUTION

SMART
SENSING



AliveCor®

SMART
IMAGING



HYPERFINE

SMART
TREATMENT



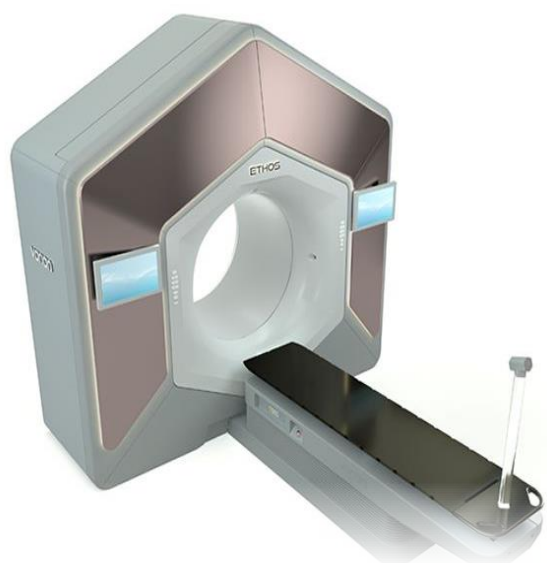
HURON
Digital Pathology



care.ai™



SIEMENS
Healthineers



varian



Oxford
NANOPORE
Technologies



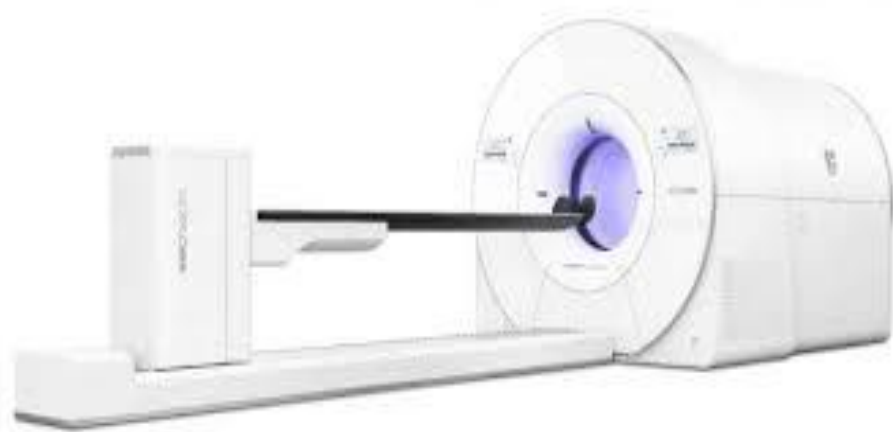
GE Healthcare



INTUITIVE
SURGICAL®



Butterfly™



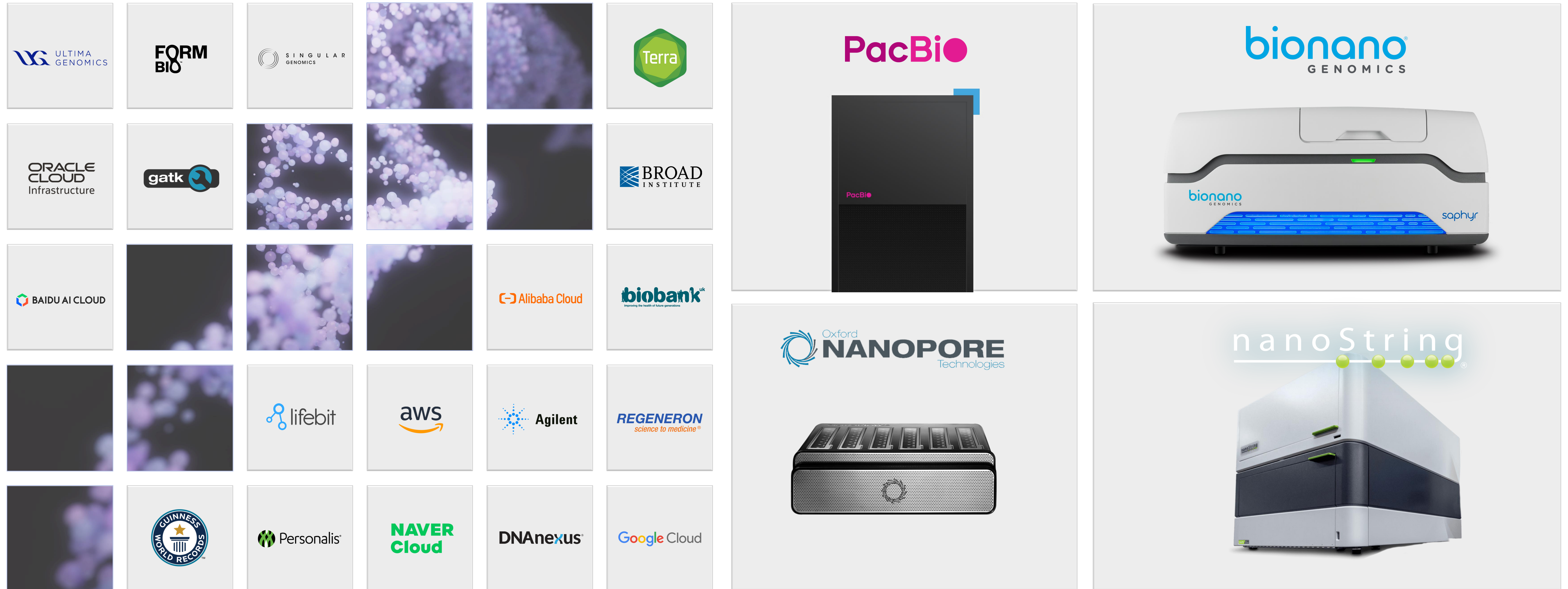
UNITED
IMAGING



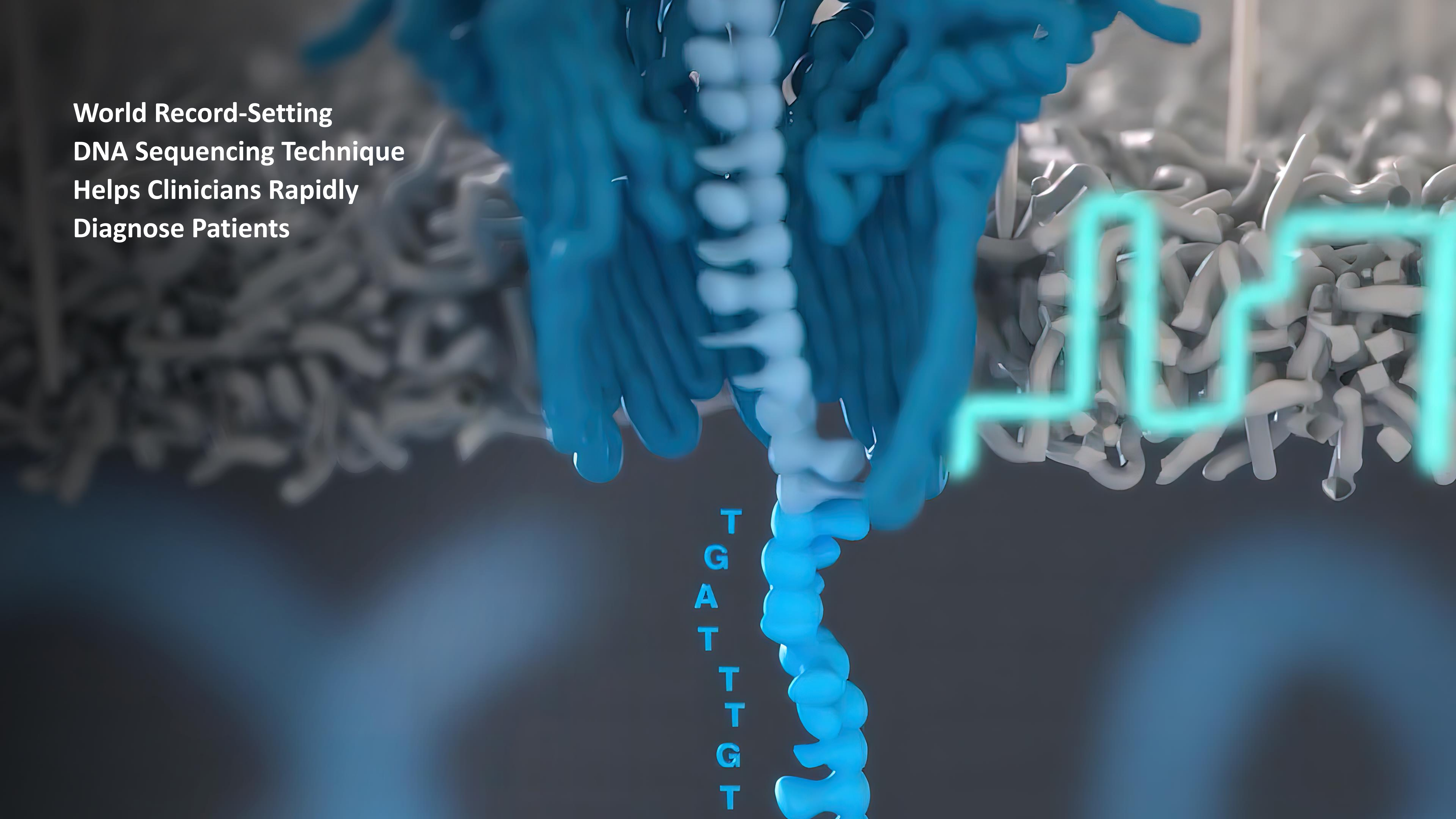
OLYMPUS®

AI Accelerated Genomics

Genomics Analysis | Reduced Cost | Fastest Time to Insight



World Record-Setting
DNA Sequencing Technique
Helps Clinicians Rapidly
Diagnose Patients

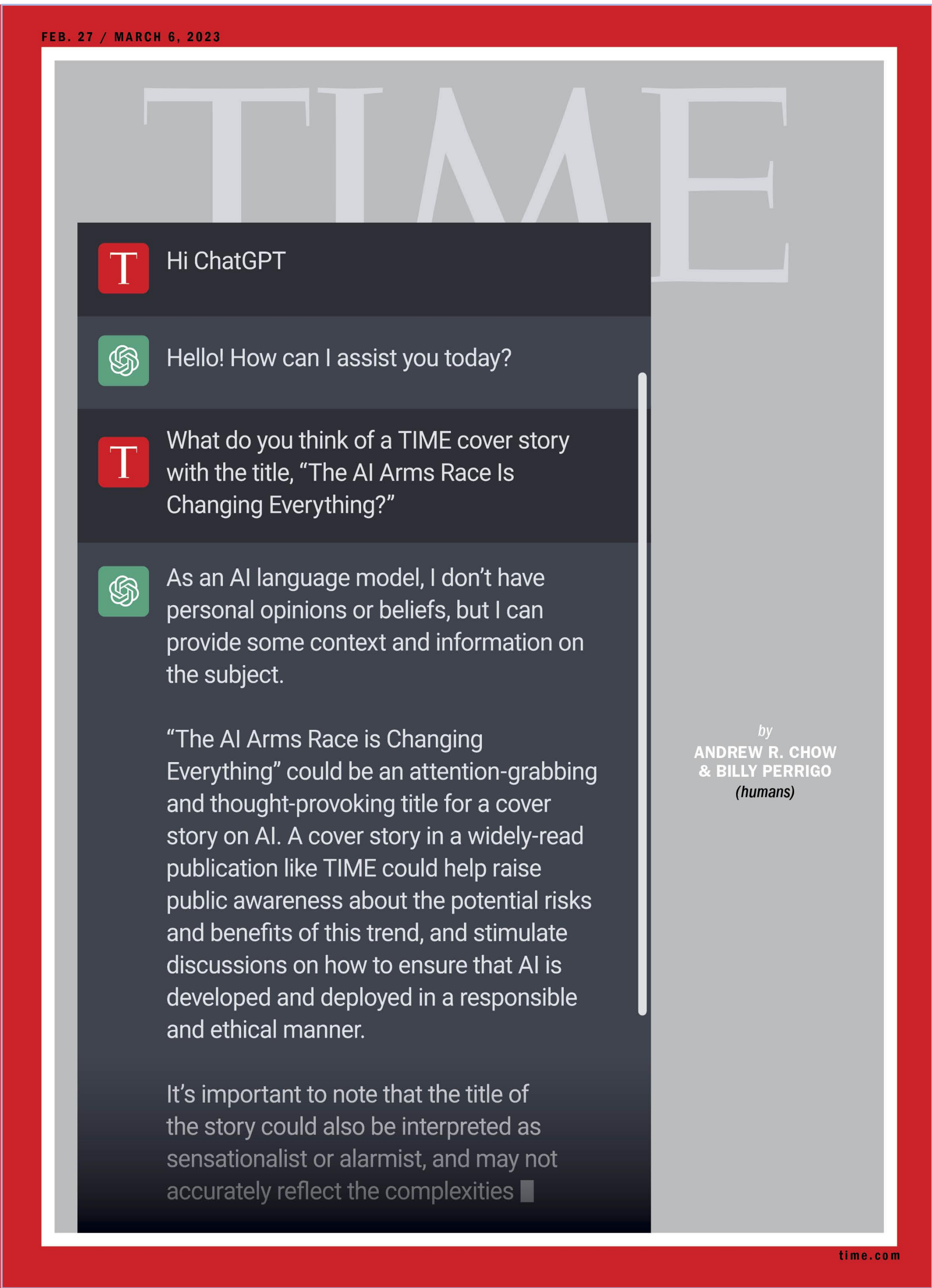


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The Next Chapter of AI is Here

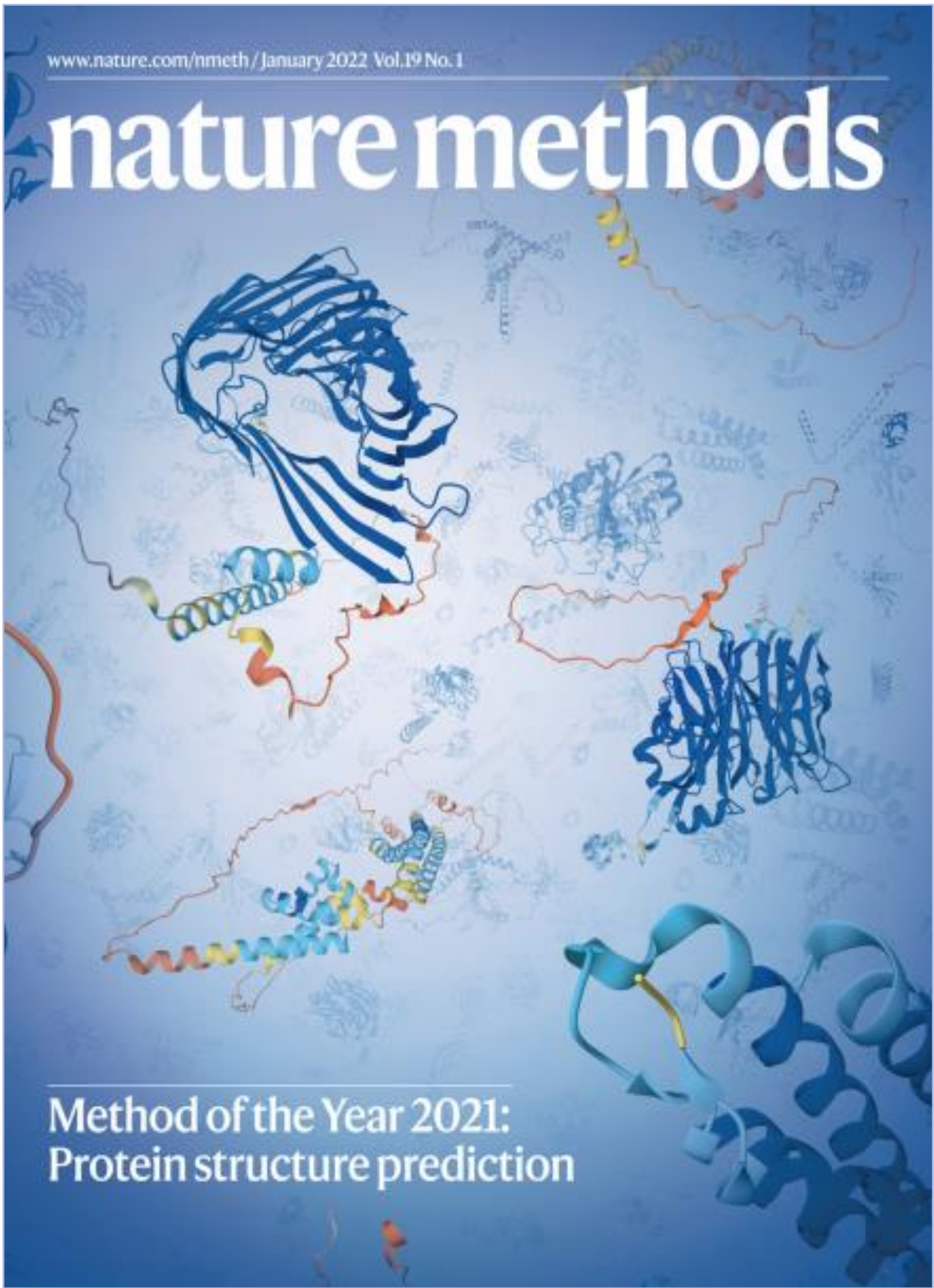
CHATGPT



DALL-E



ALPHAFOLD



Healthcare LLMs in Natural Language



Medical Imaging is Essential to Healthcare Delivery



Healthcare Chatbots

Patient, Physician-Facing
Payers, Hospital Systems, Healthcare LLM ISVs

Reasoning Tools

Reason Over Proprietary Data, Discovery Applications
Pharma, CROs, Data Brokers, Payers

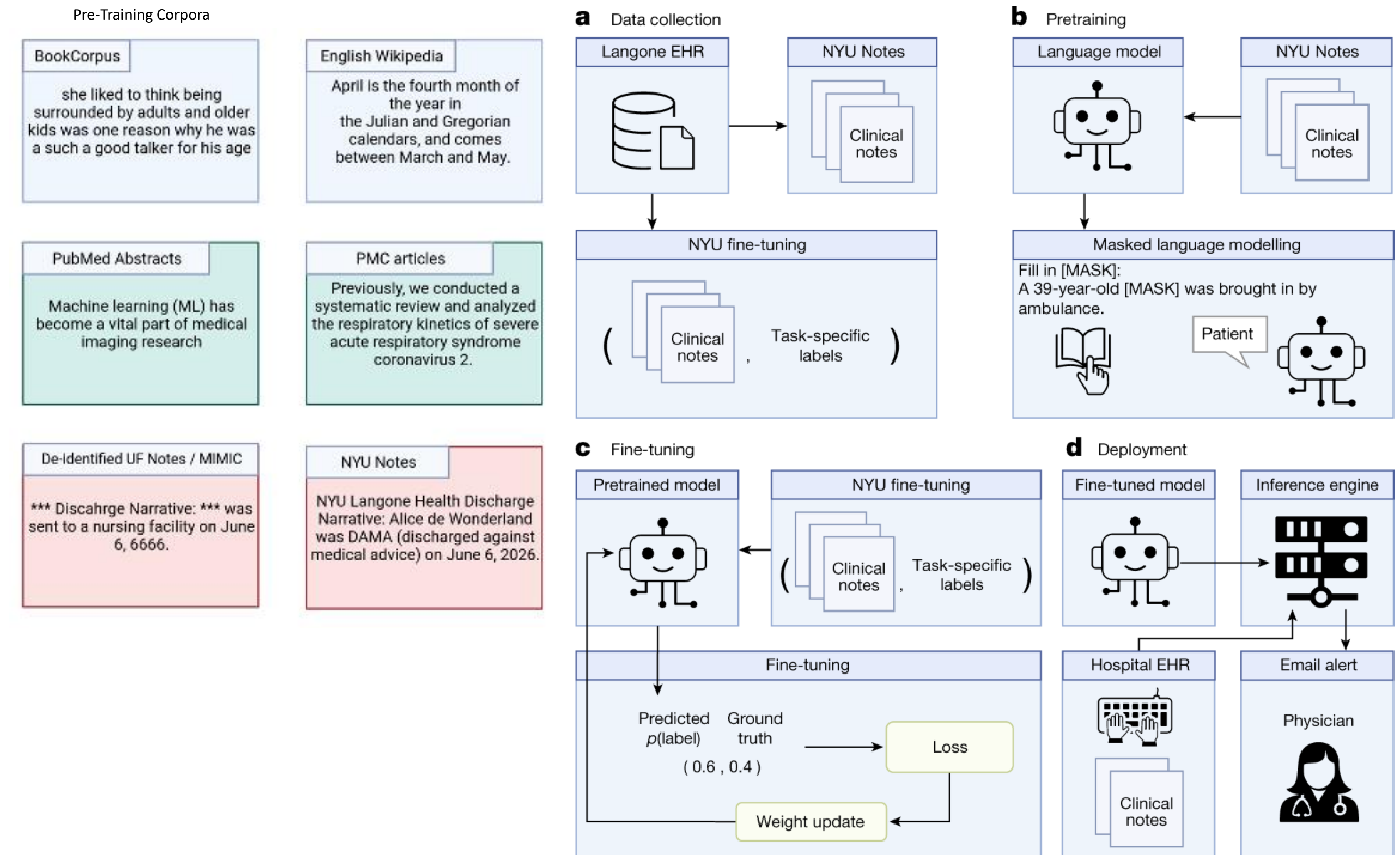
Operational Assistance

Documentation Generation, Summarization, Coding, Automation
Everyone!

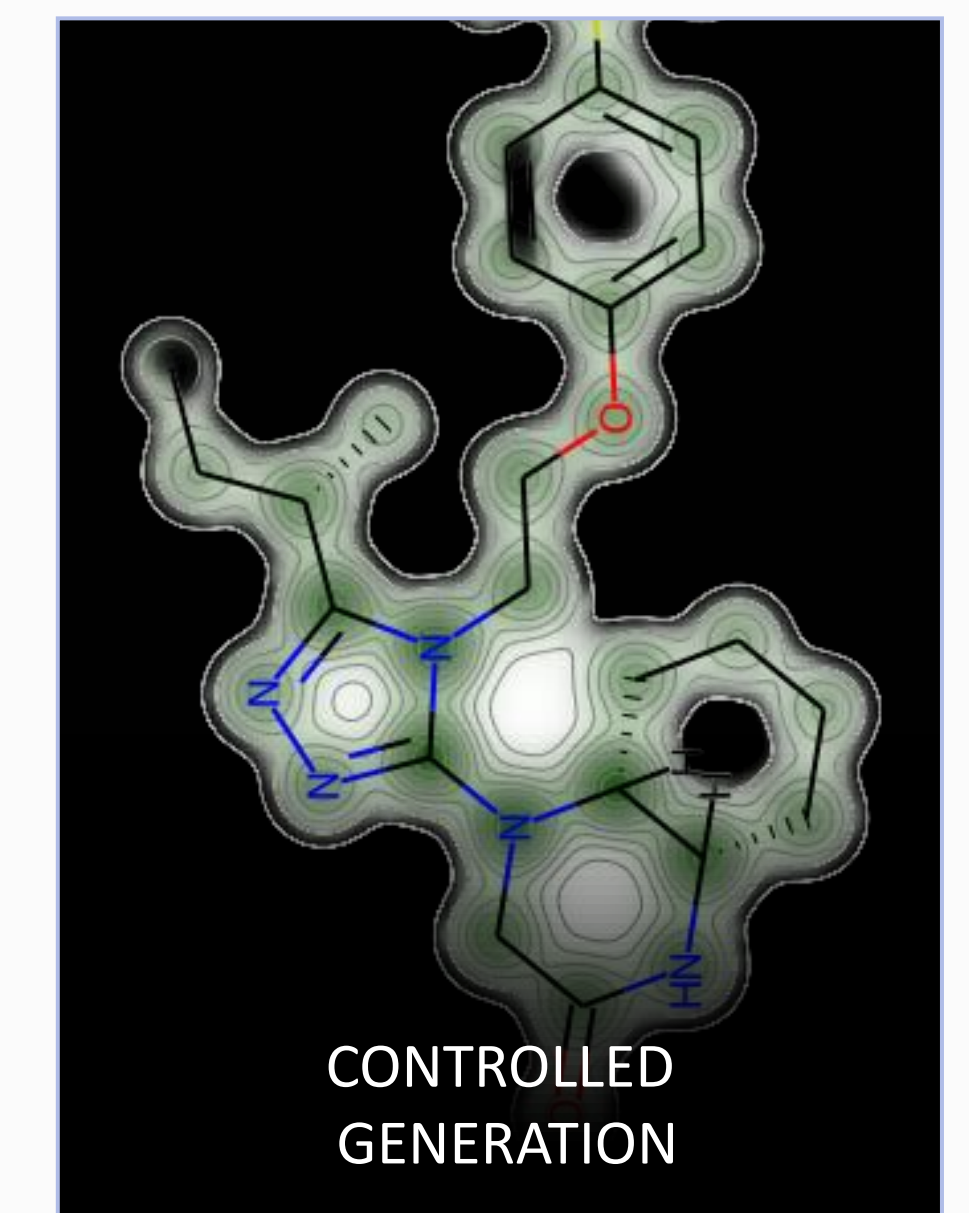
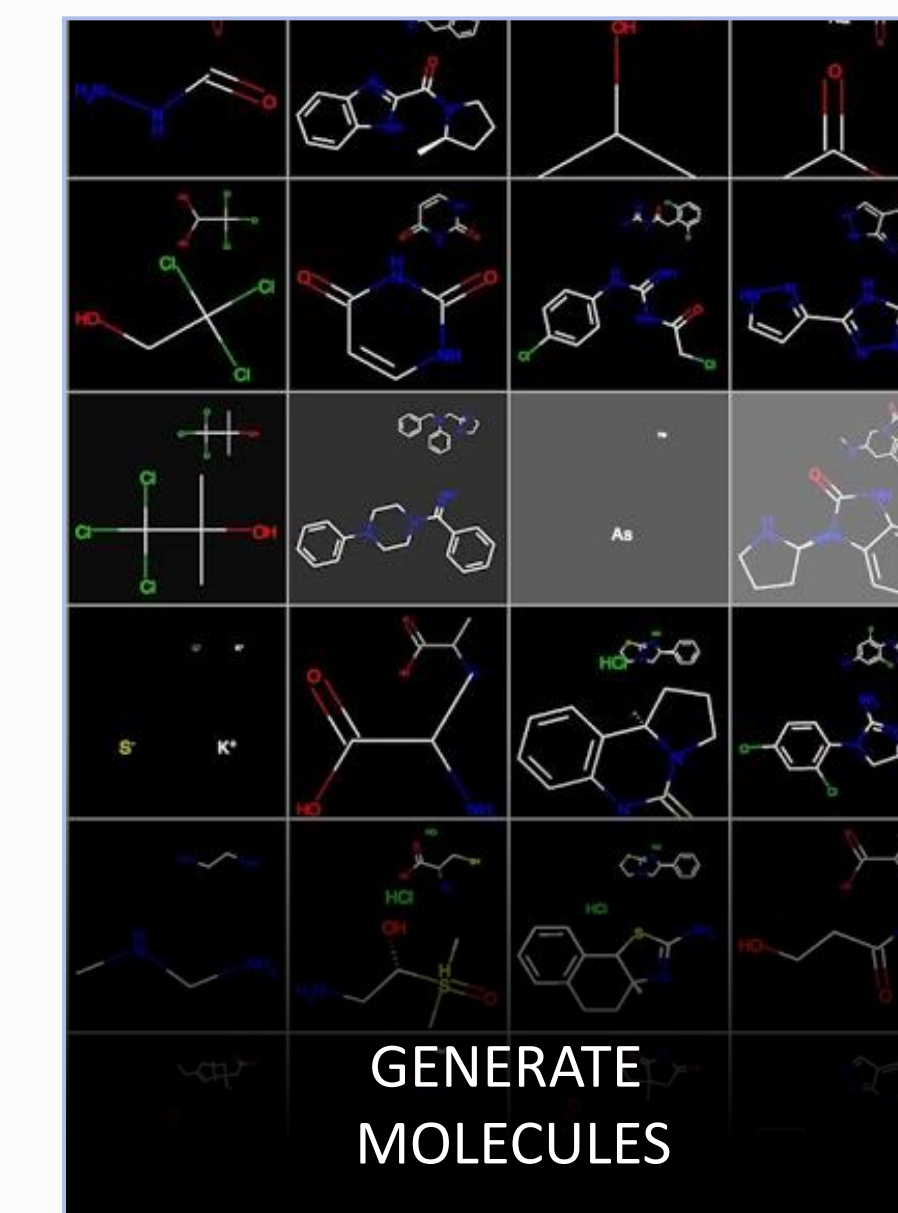
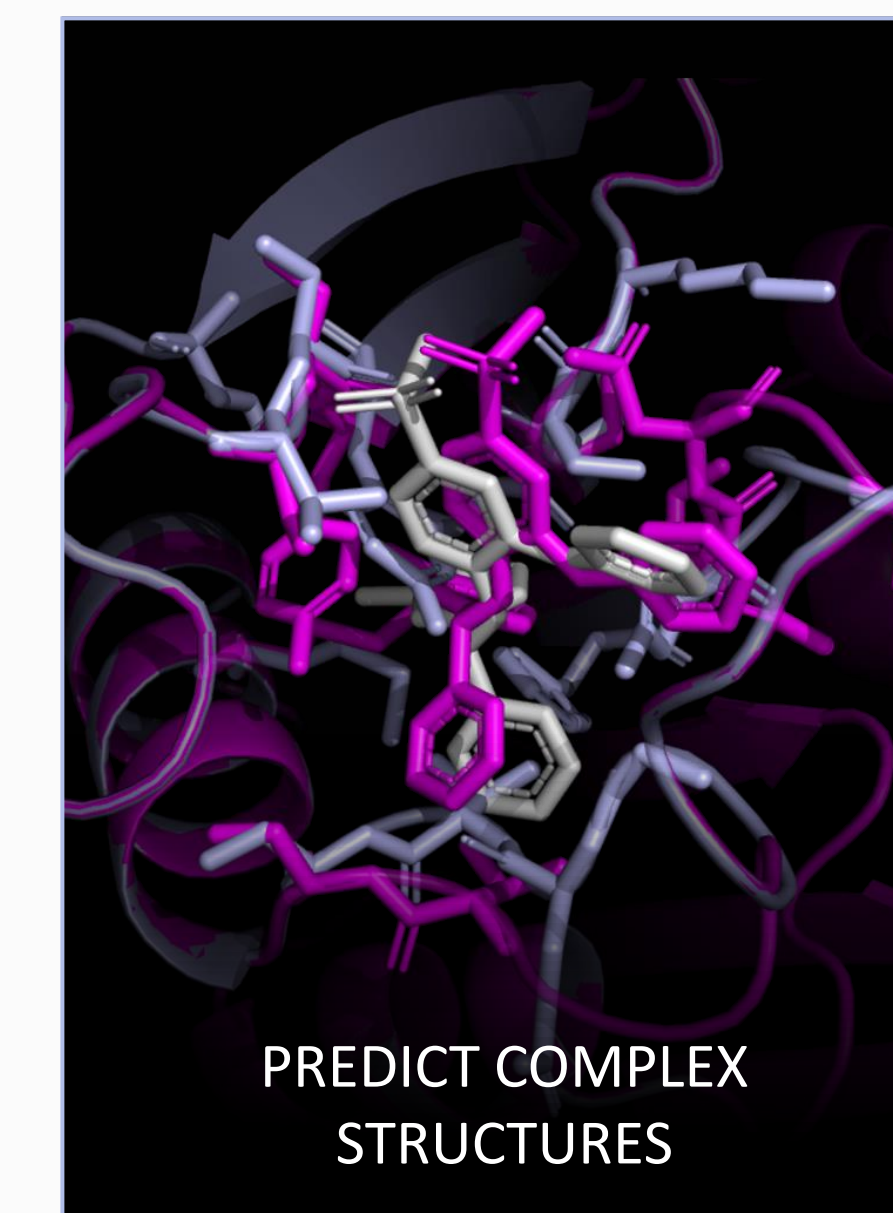
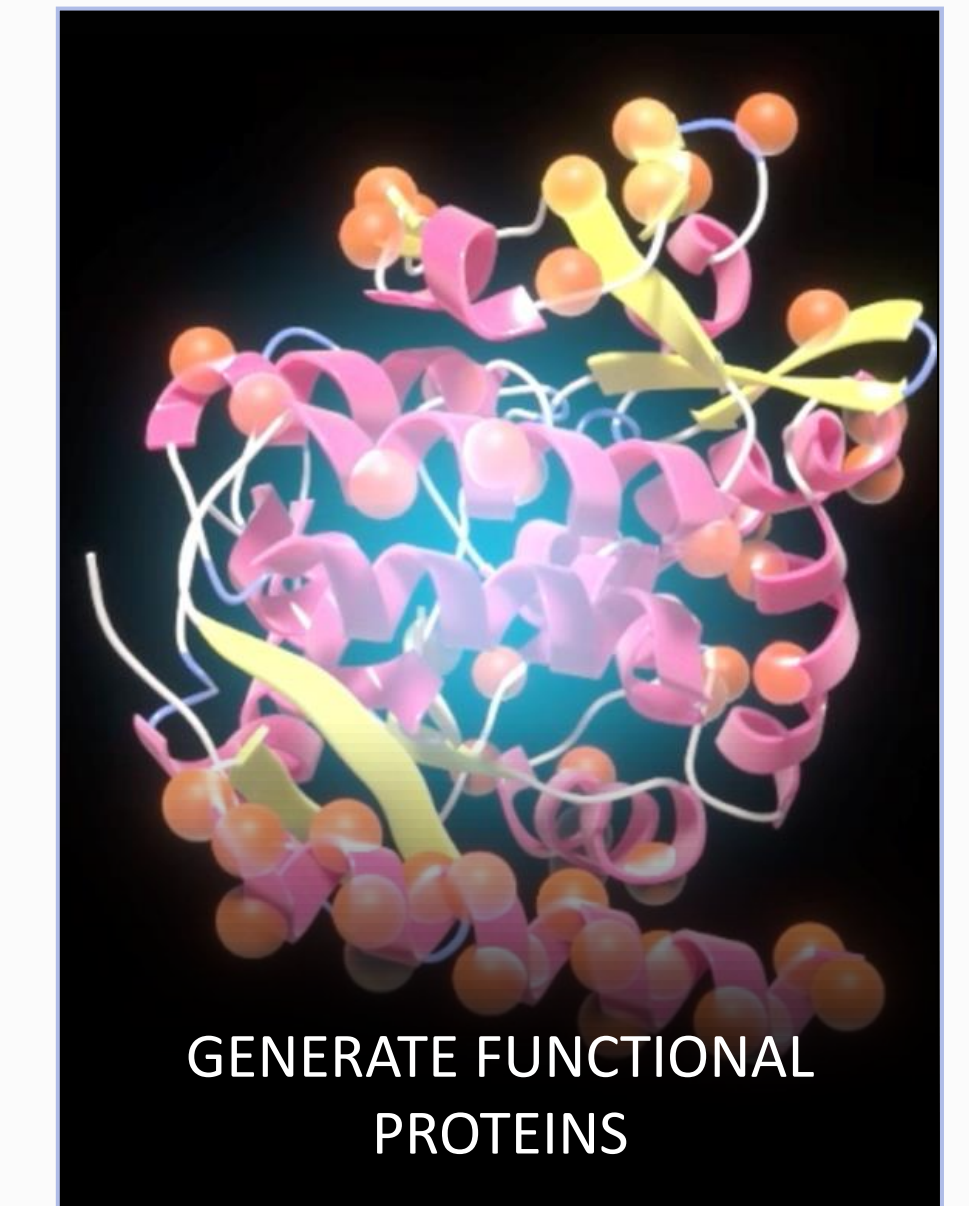
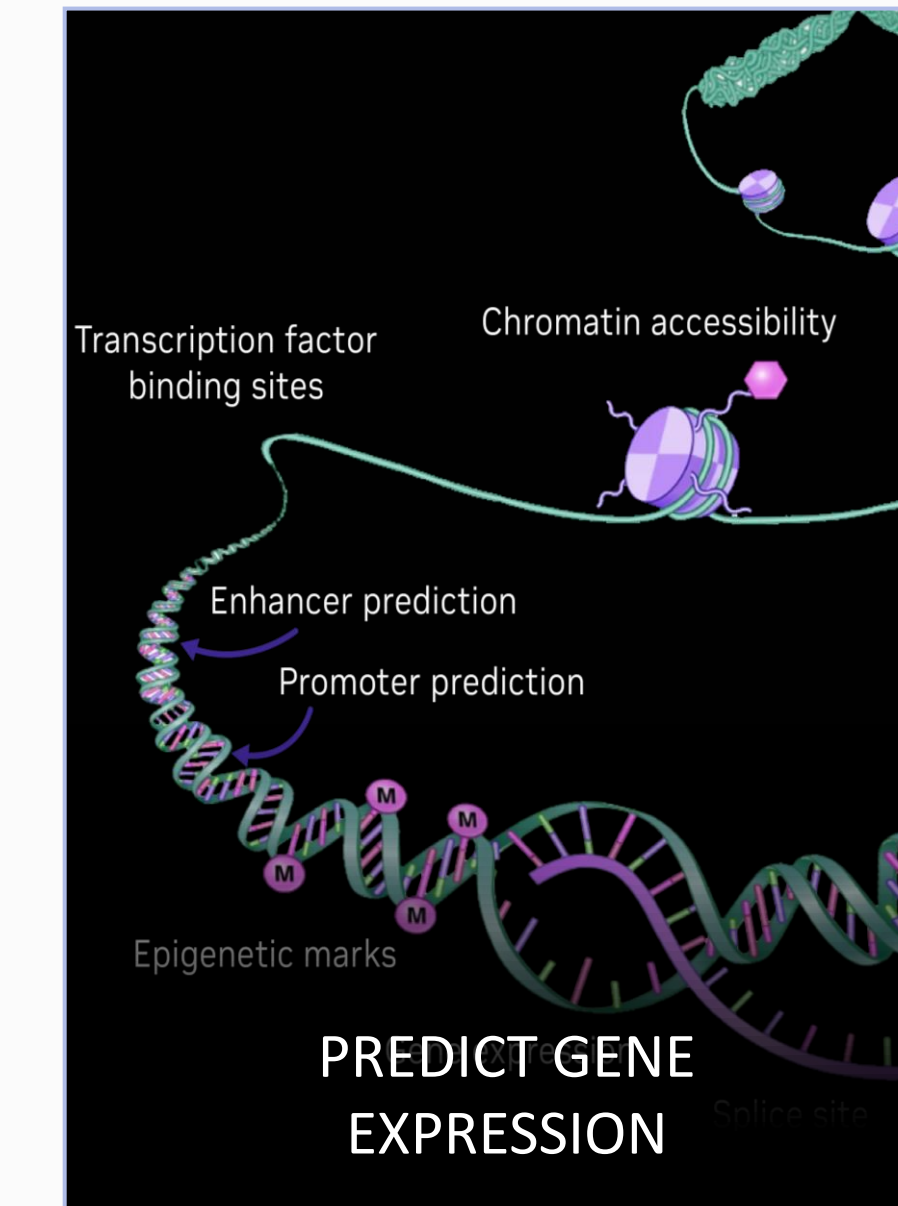
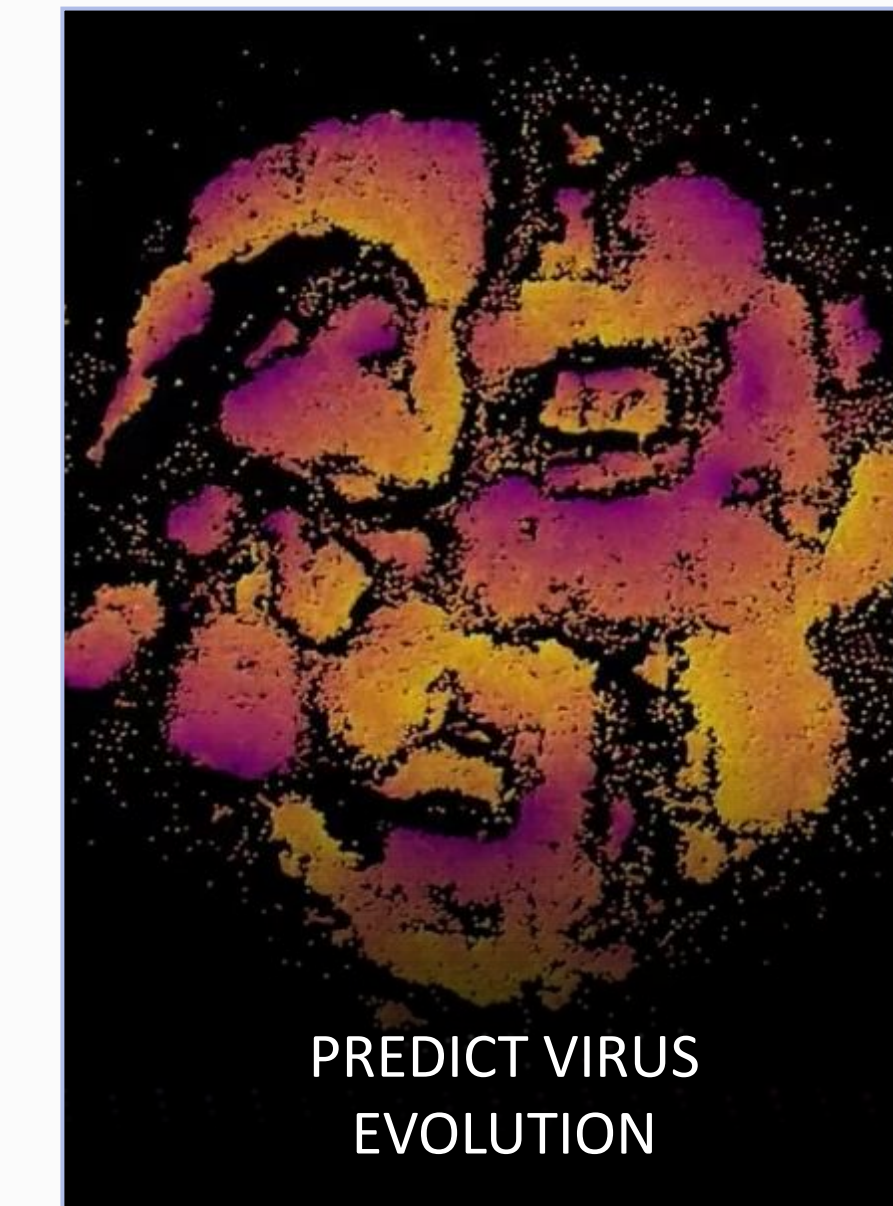
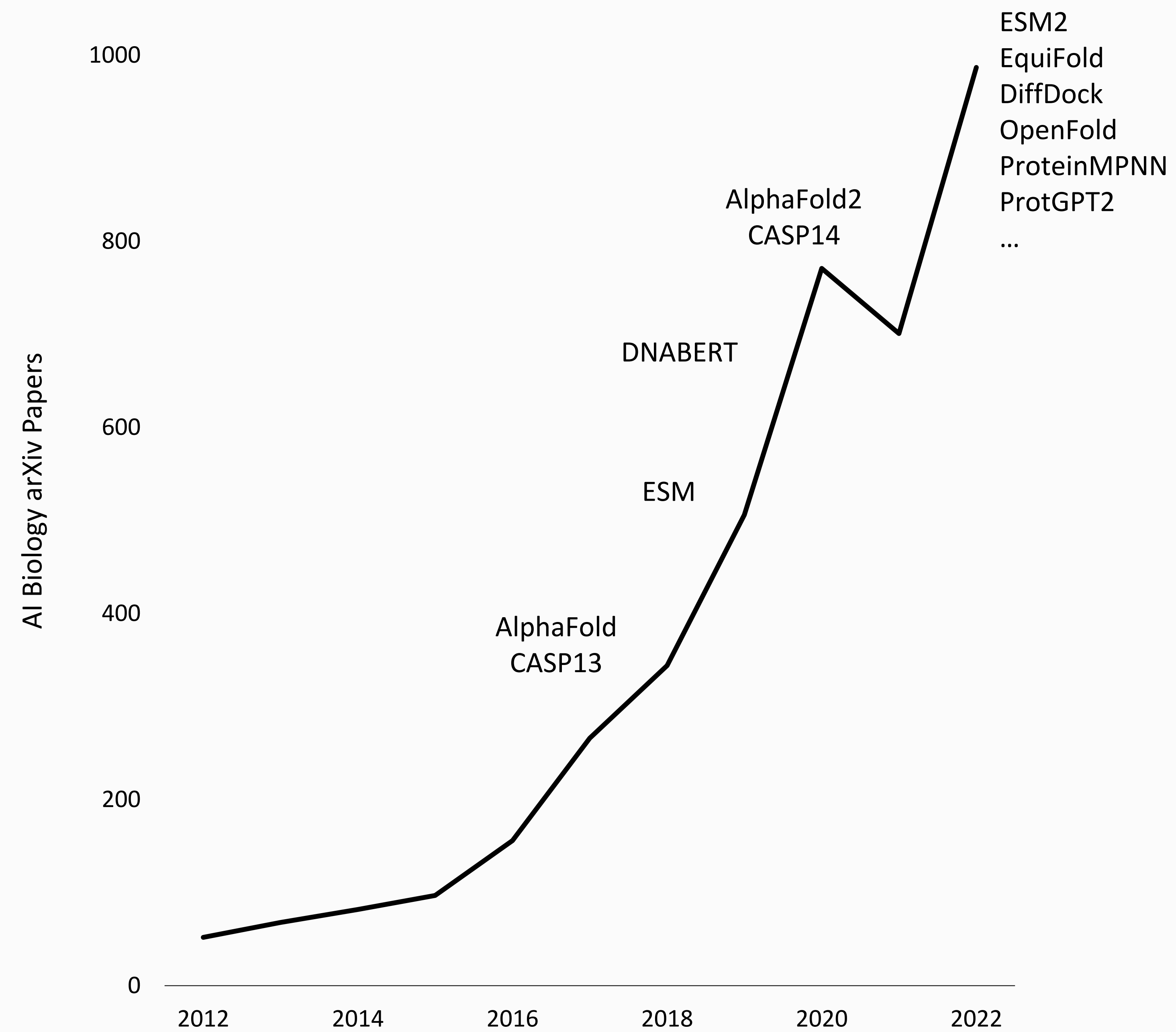
Health System-Scale Language Model

NYU Langone Health – NYUTron – Hospital Operations & Patient Care

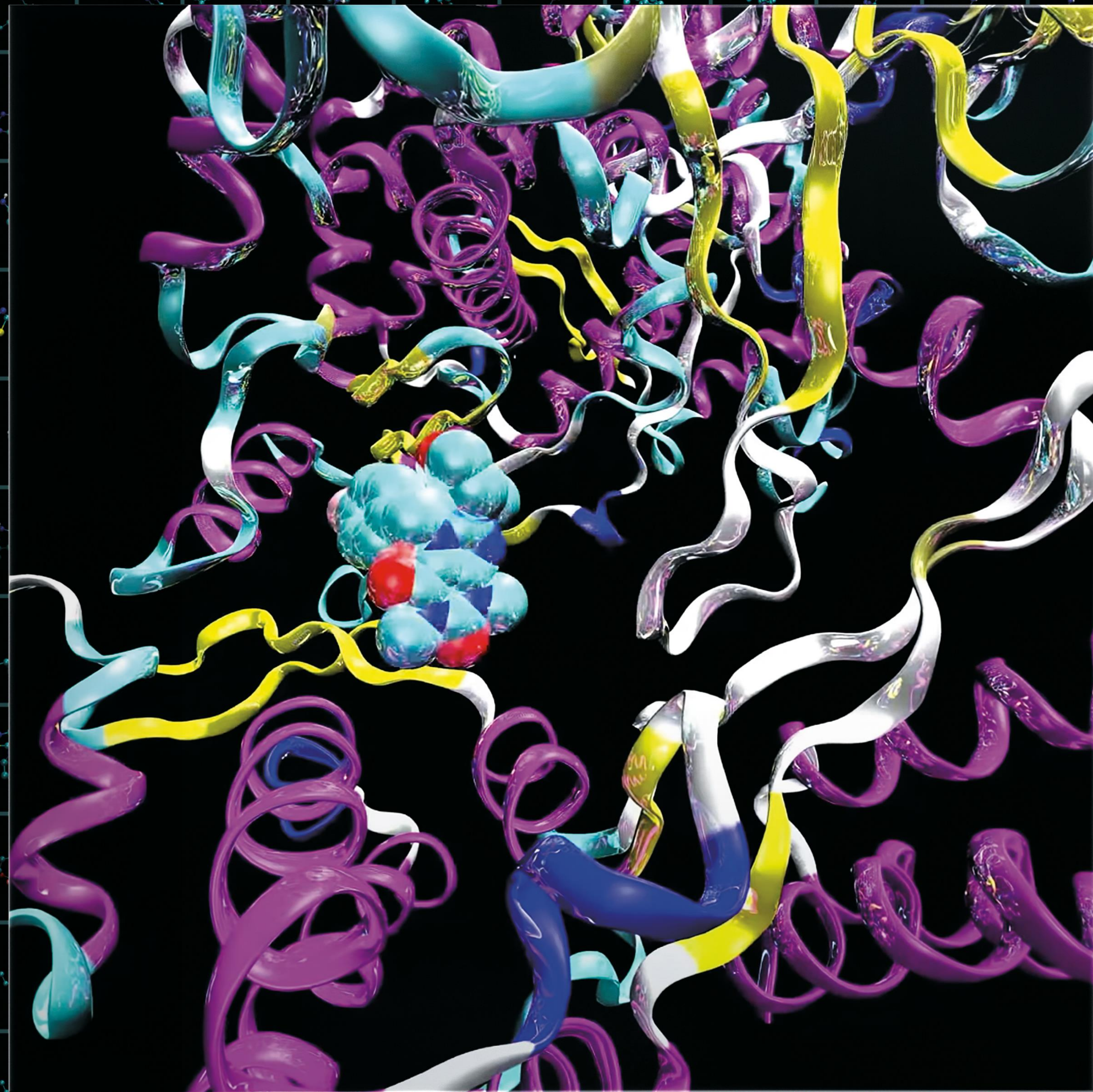
- **NYUTron:** A Large Language Model (LLM) predicting hospital readmission & health outcomes.
- **Strength:** Processes unstructured data in electronic health records.
- **Performance:** Predicts 80% of readmissions, surpassing non-LLM models.
- **Function:** Alerts providers on readmission risks, boosting care & workflow.
- **Potential:** Paves way for "smart hospitals" & healthcare transformation.
- **Role:** Enhances, not replaces, healthcare provider expertise.



Generative AI is Transforming Biology from Science to Engineering



**Generative AI
Will Transform the
Pharmaceutical Industry**



AI IS NOT THE ENEMY
Let's show it the way!



