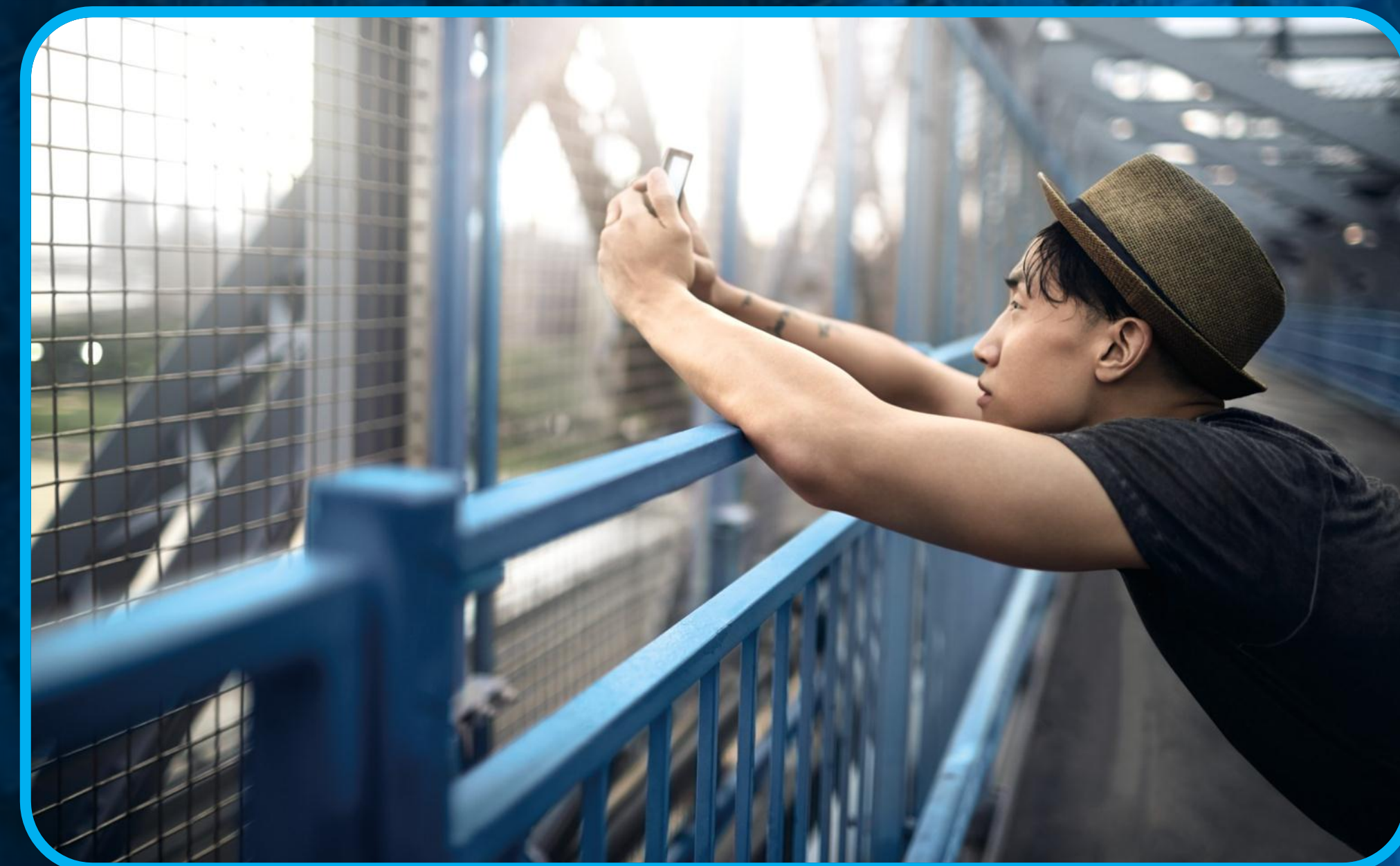


Look Inside.™

A New Era of Integrated Computing

Integrated in Our Lives



Managing Global Cities

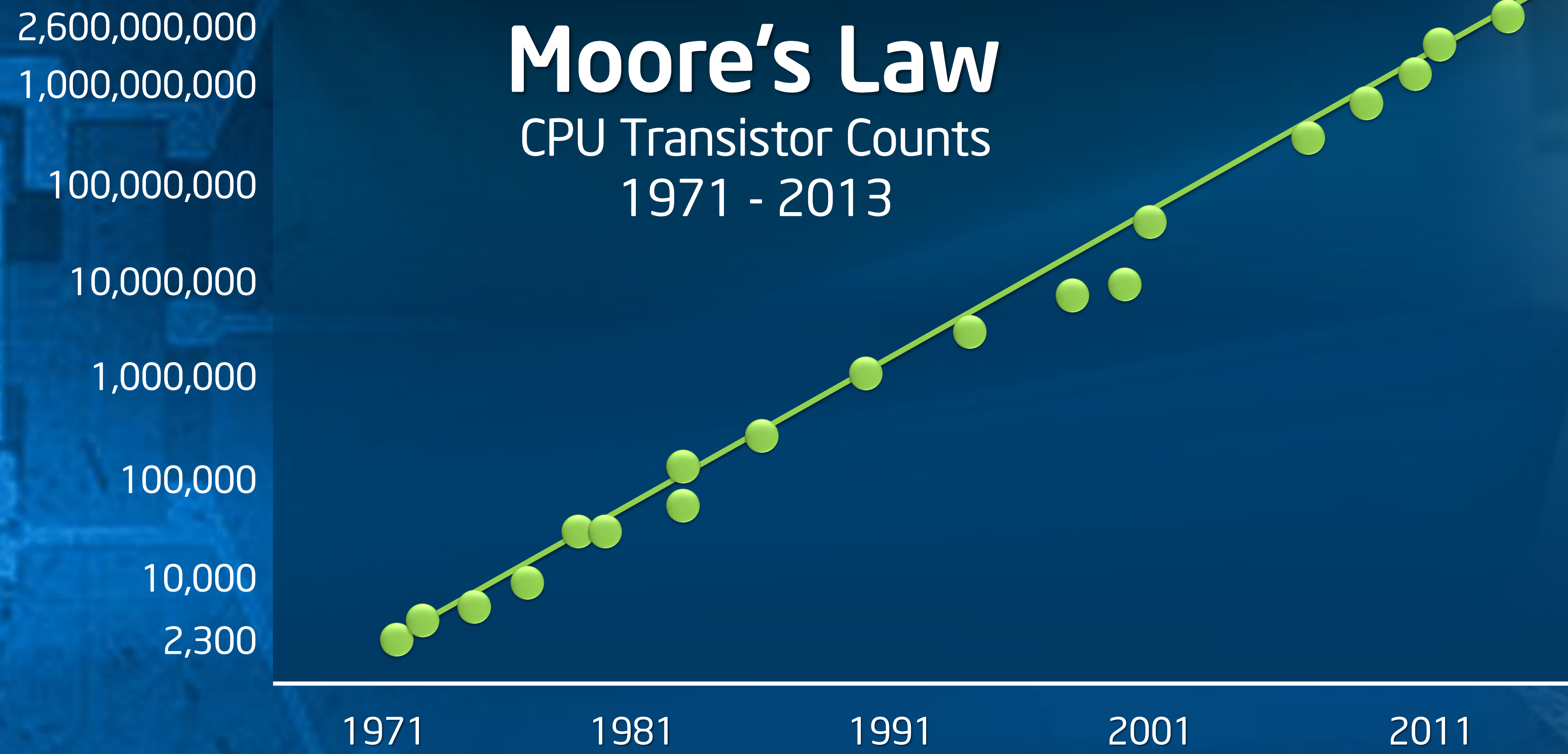


Delivering Tailored Healthcare



Moore's Law

CPU Transistor Counts
1971 - 2013

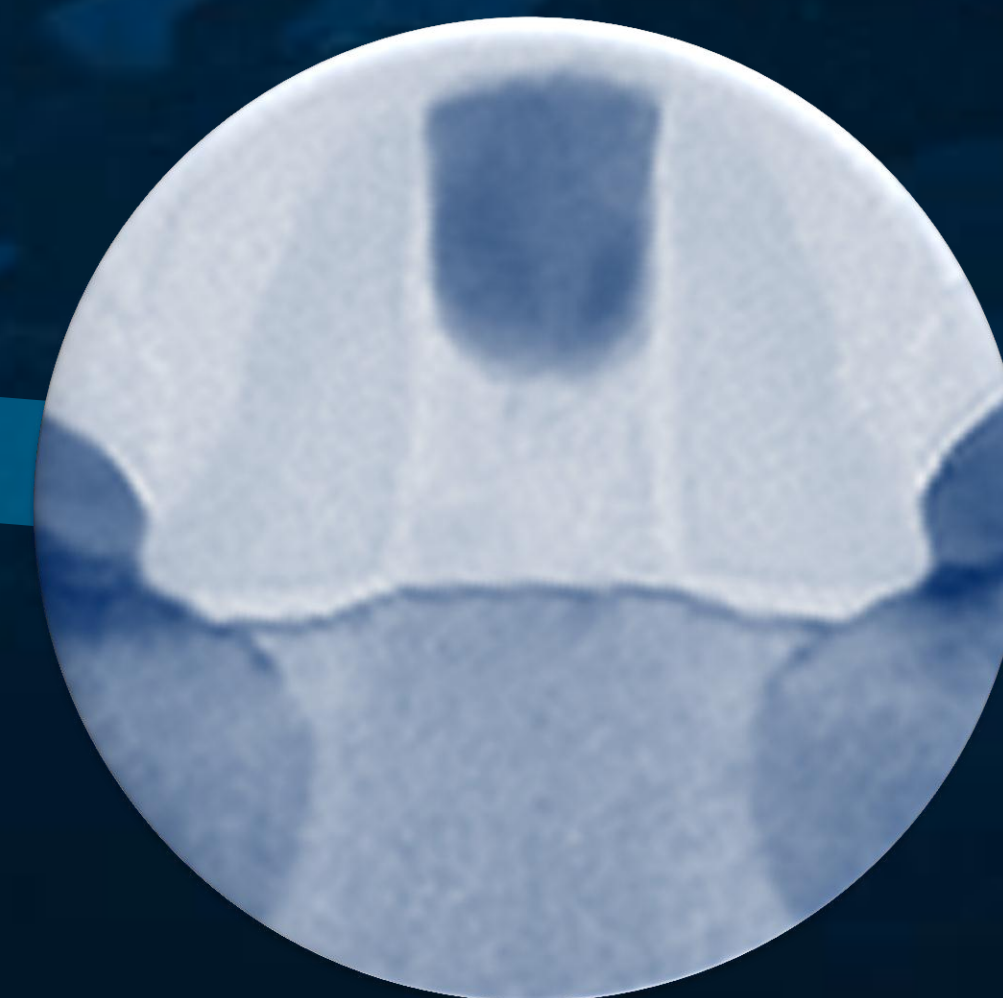


TRANSISTORS

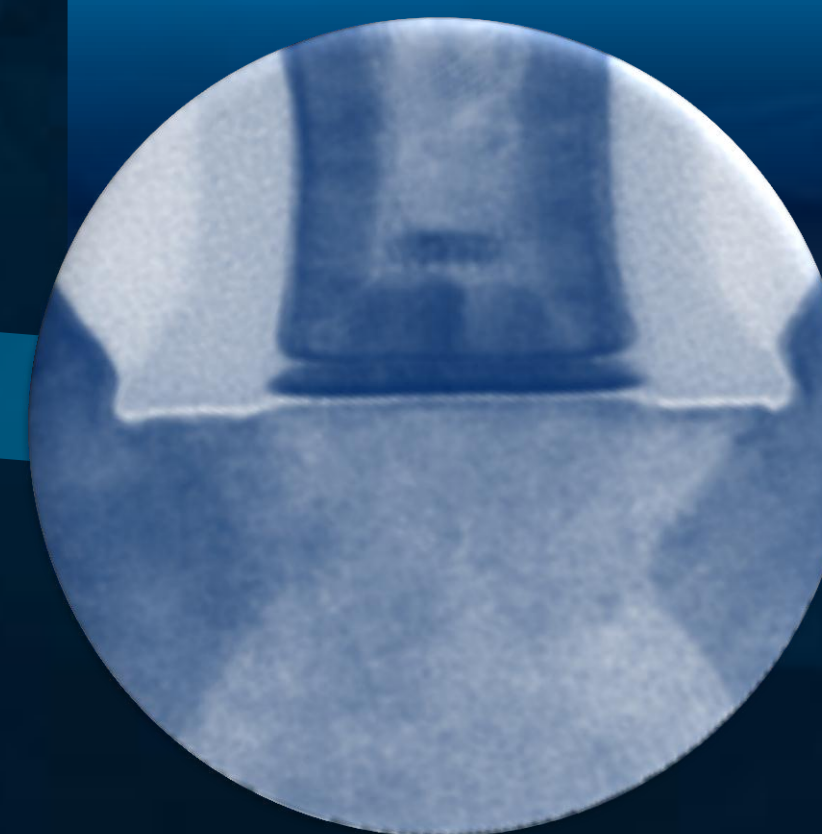
The Essential Element of Innovation



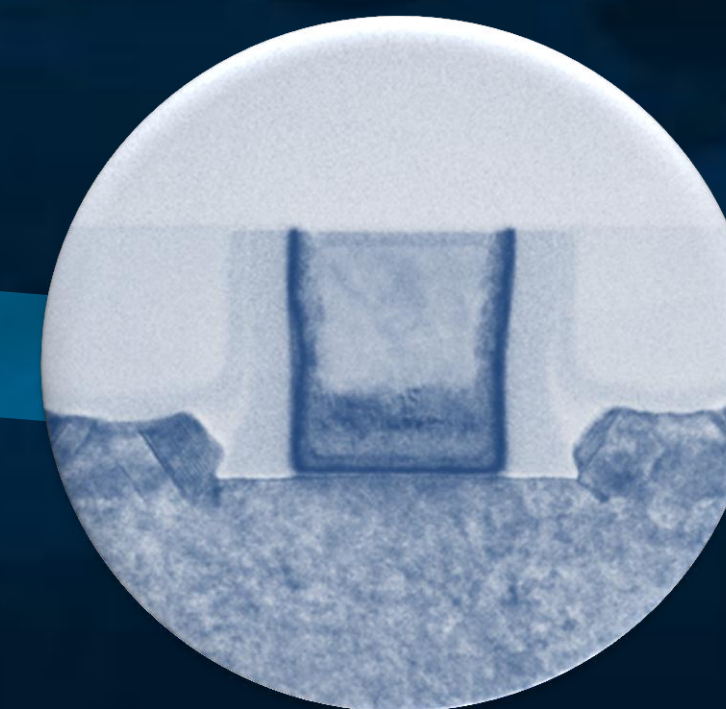
90 nm
2003



65 nm
2005



45 nm
2007



32 nm
2009



22 nm
2011



14 nm
2013



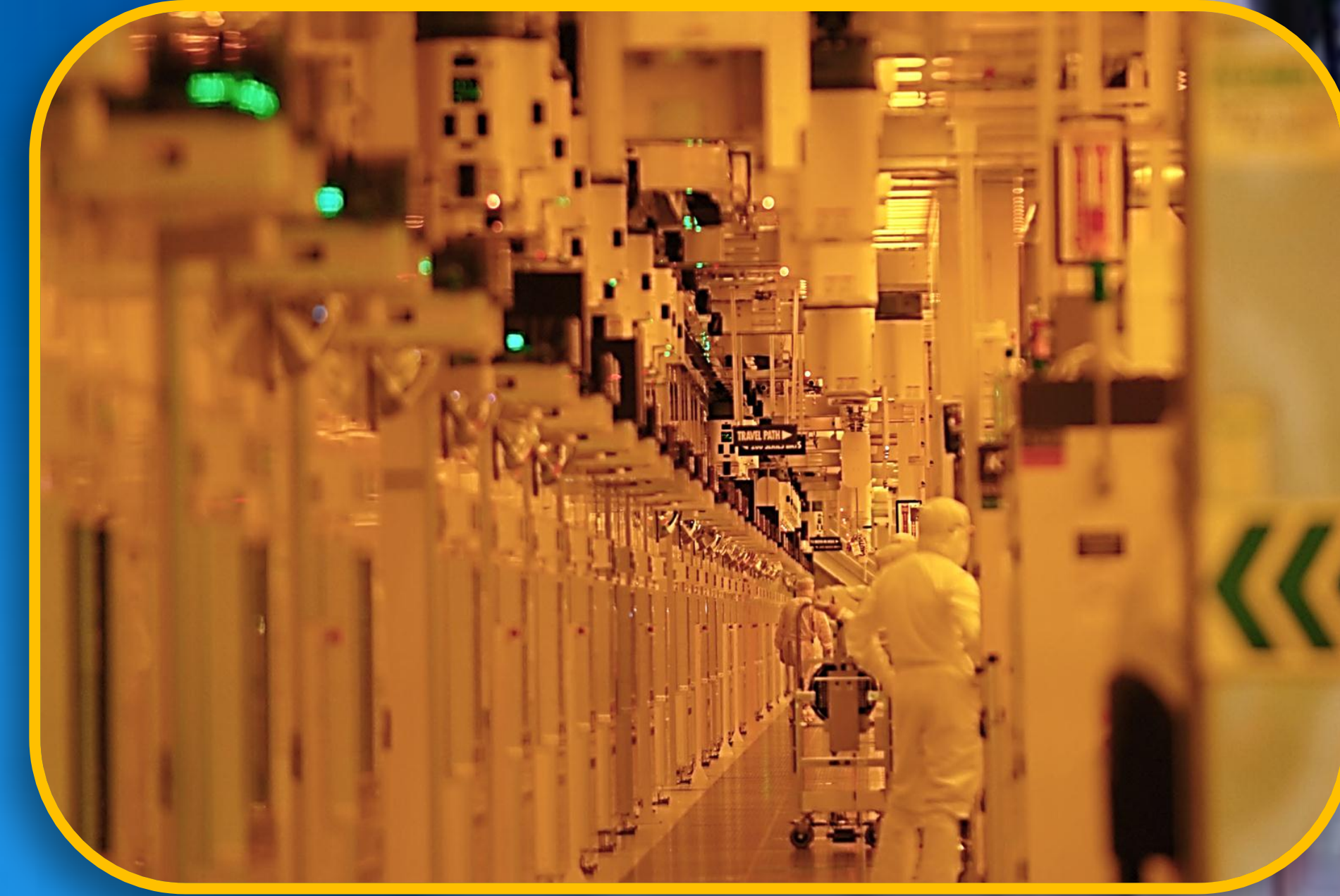
10 nm
2015



7 nm
2017



Billions of Transistors Per Chip



Overcoming
**TECHNICAL
BARRIERS**

*"3D devices are too costly and
not manufacturable."*

*"Gate last approach
cannot be manufactured."*

*"Hi-K is limited to
low performance."*

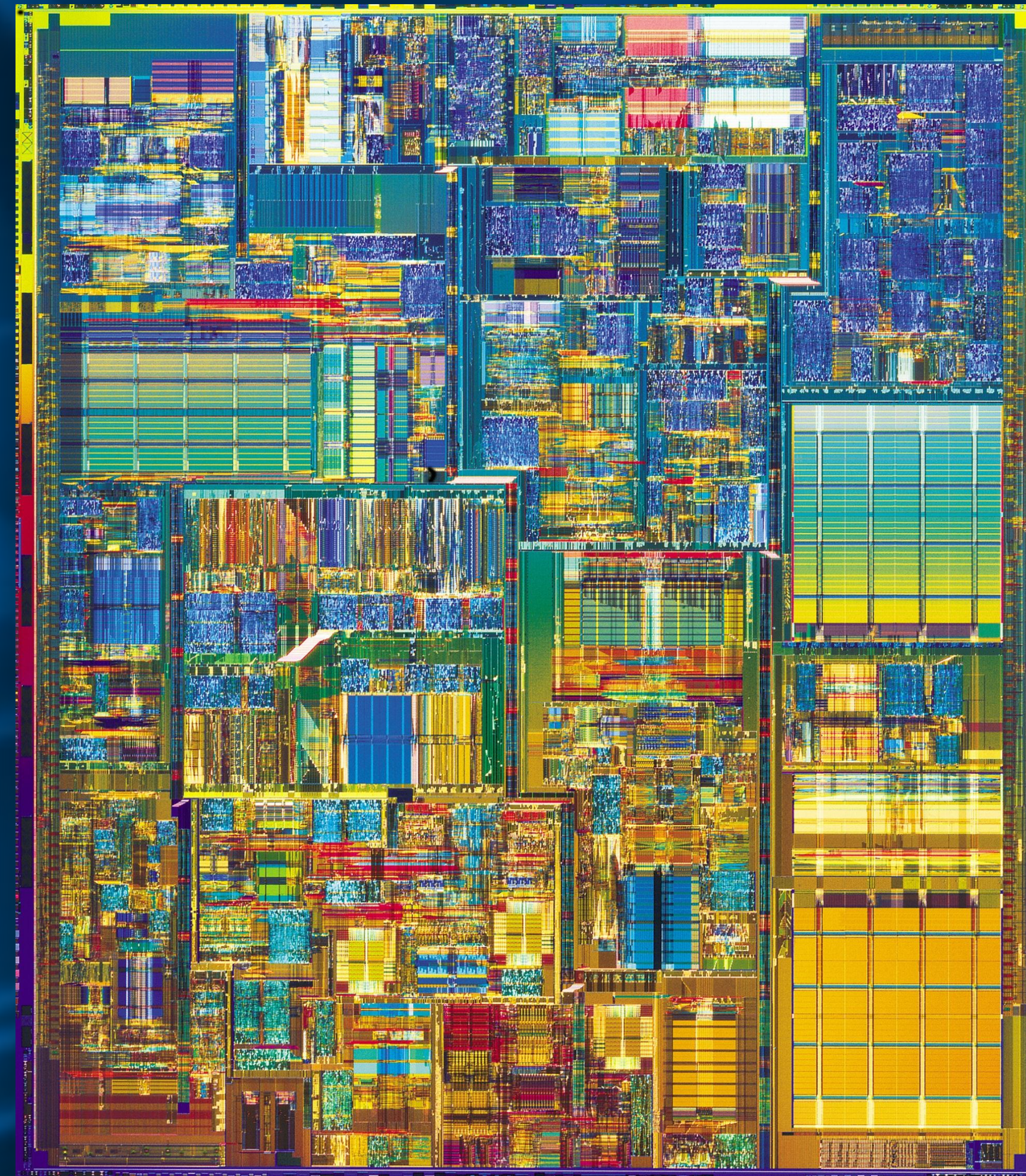
*"Phase shift masks will never
be used in production."*

From Cell Phone to
SMARTPHONE

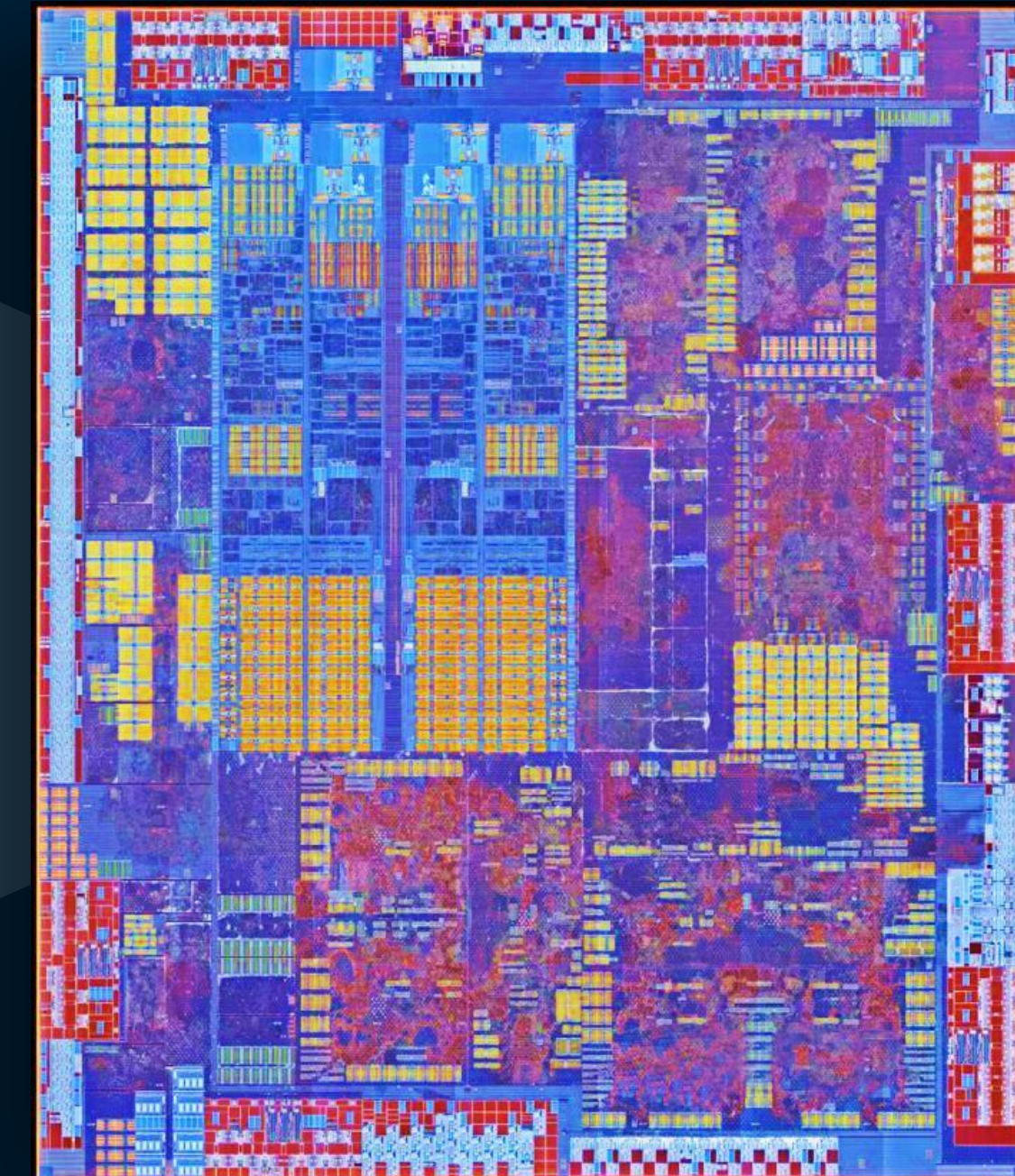


*Fundamental
Advancements in*
**SILICON
TECHNOLOGY**

Intel® Pentium® 4 Processor

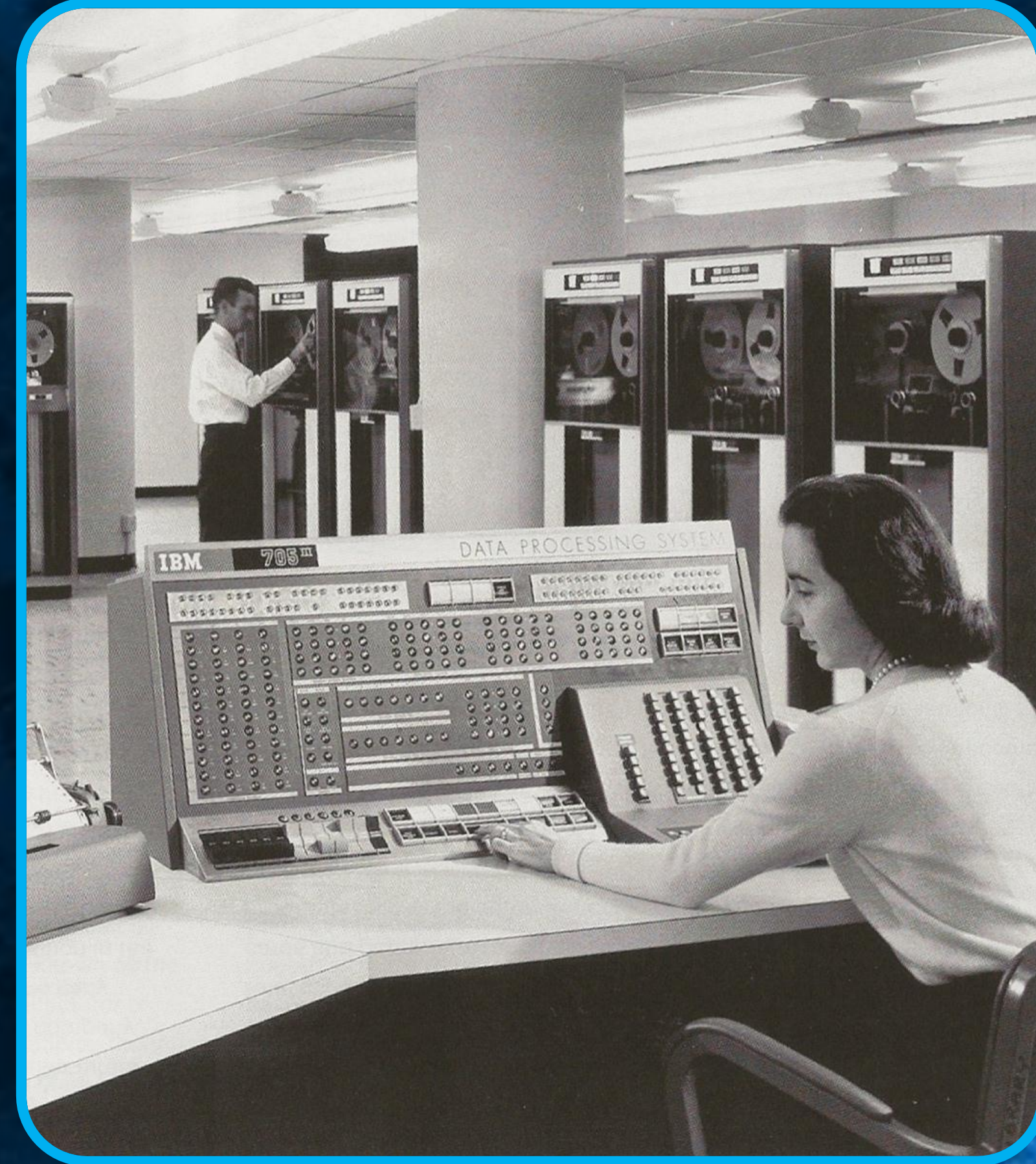


Phone Processor



Note: Processors are shown at approximate scale.

**Task-Based
COMPUTING**



**Lifestyle
COMPUTING**



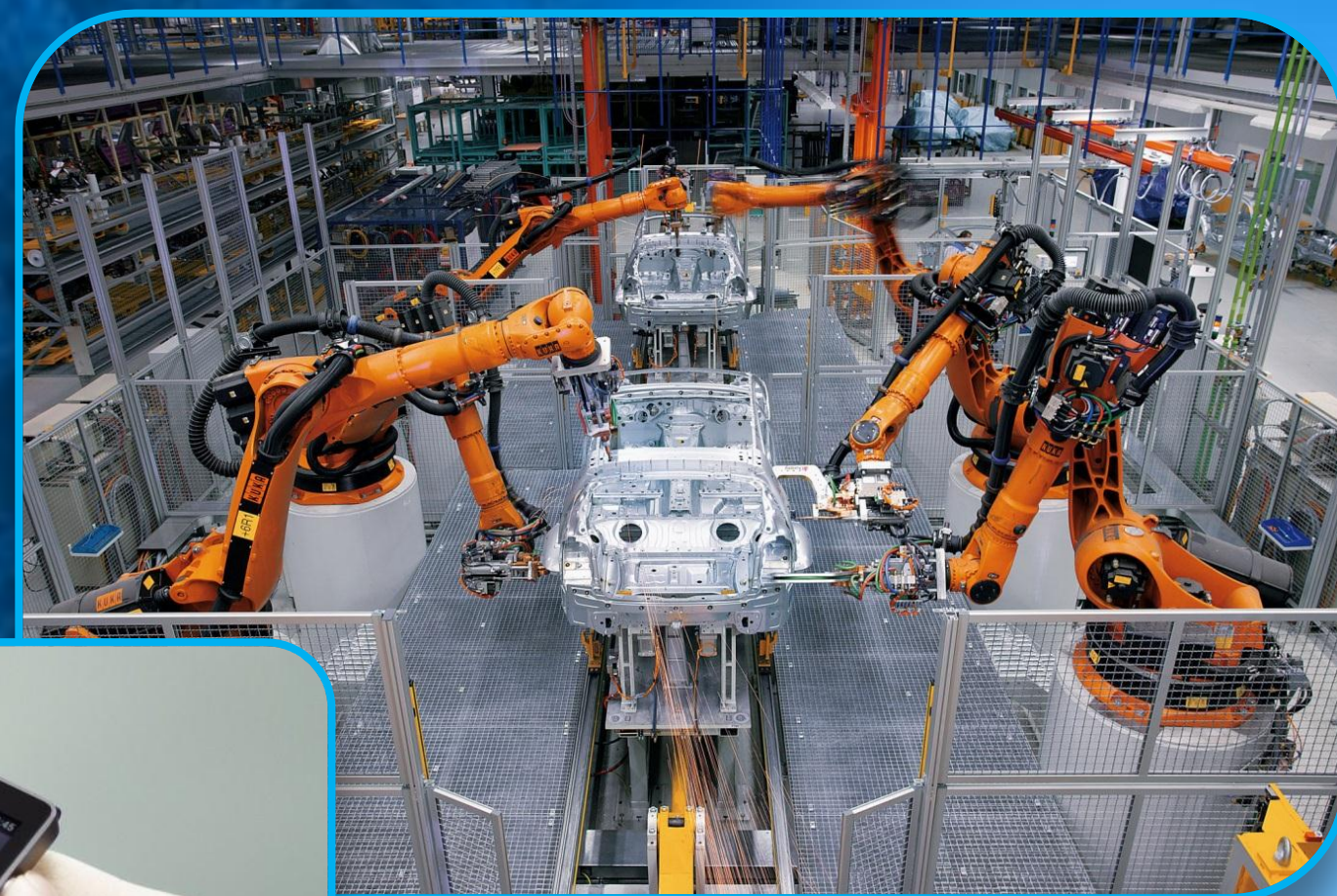
**Integrated
COMPUTING**



Lifestyle COMPUTING



Integrated COMPUTING



Dublin:
CityWatch
CitySensing



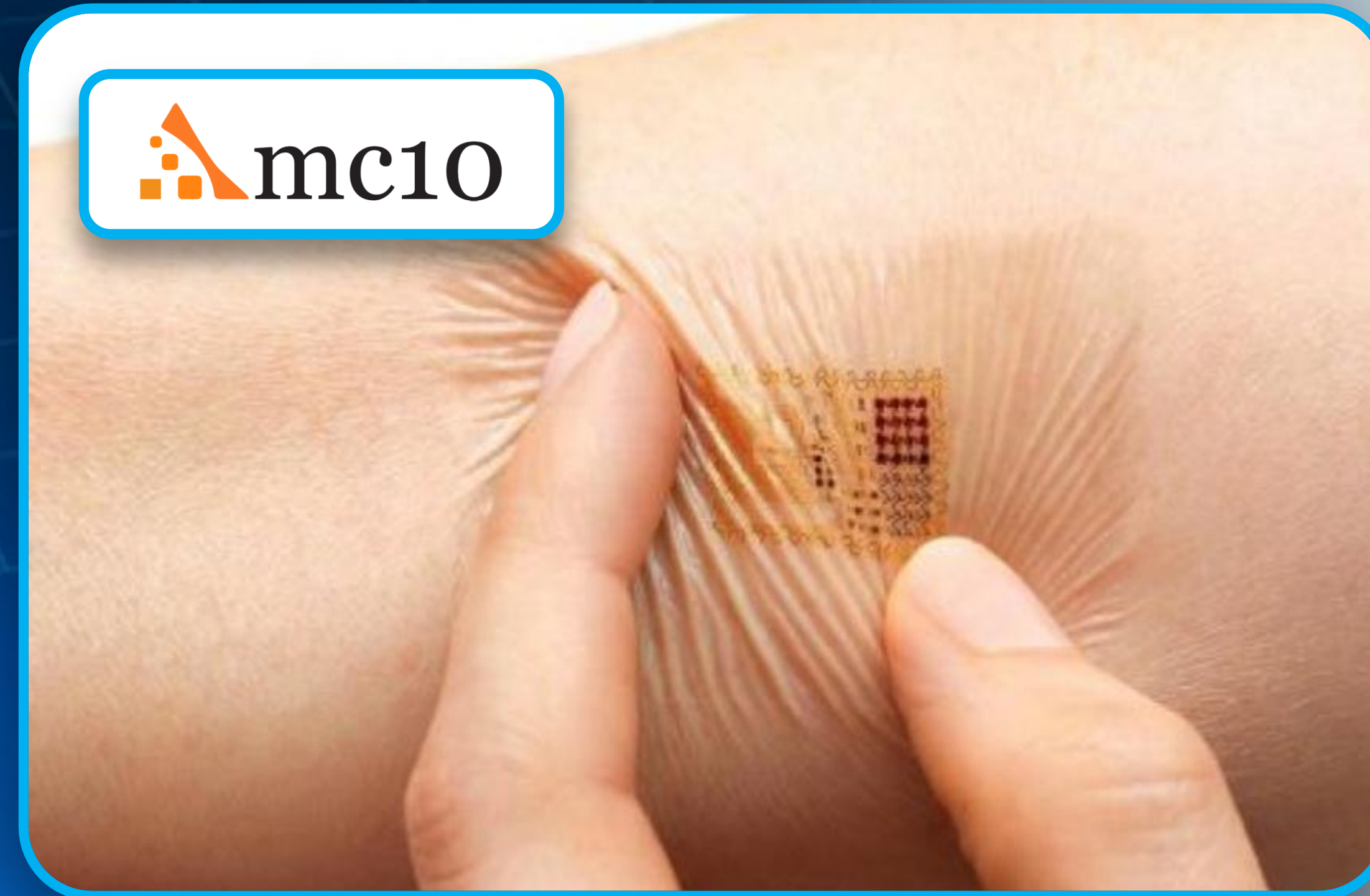


Managing
MEGACITIES

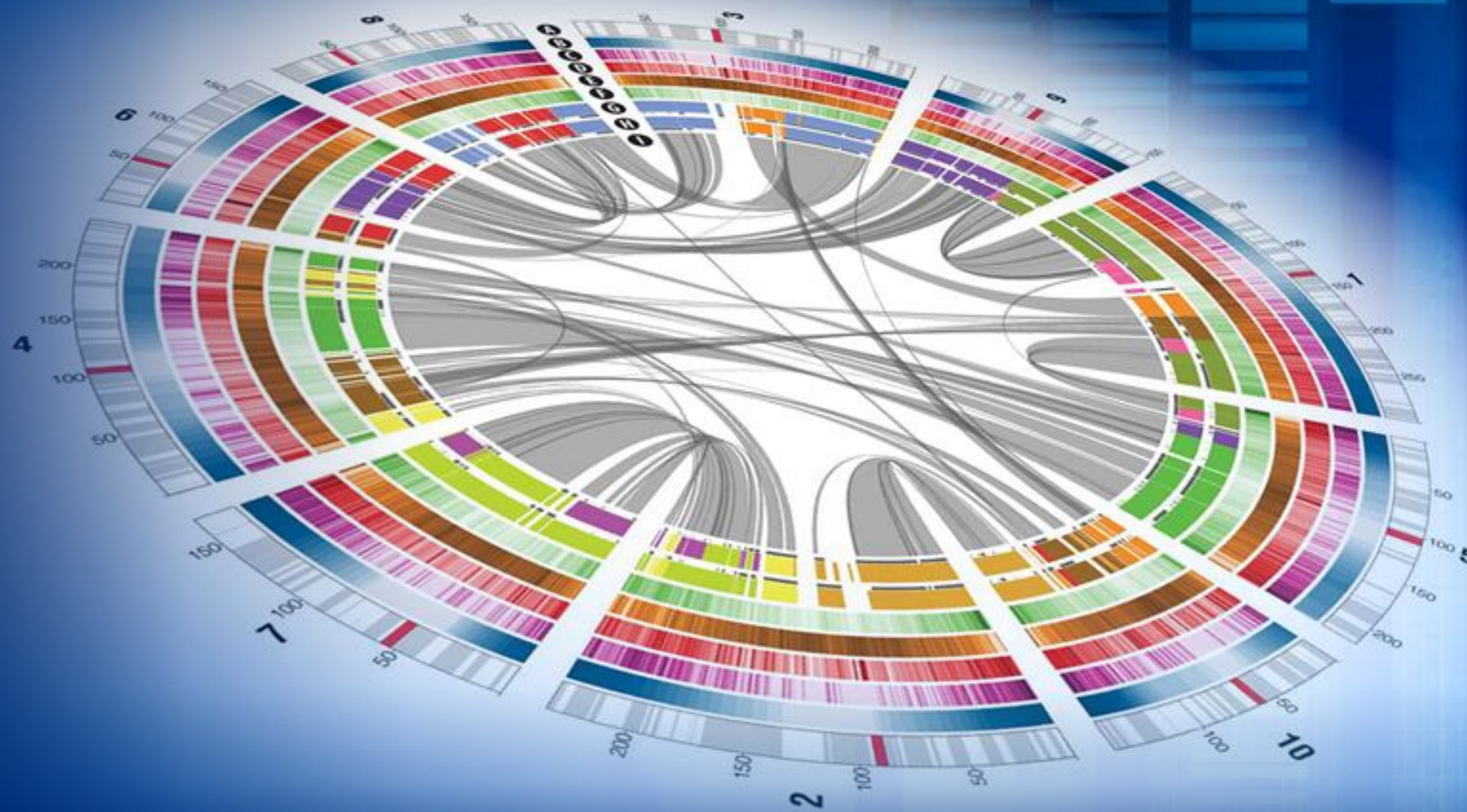


Moving Healthcare
Out of the
HOSPITAL

Providing Real-Time HEALTH INFORMATION



PULSE
/min.

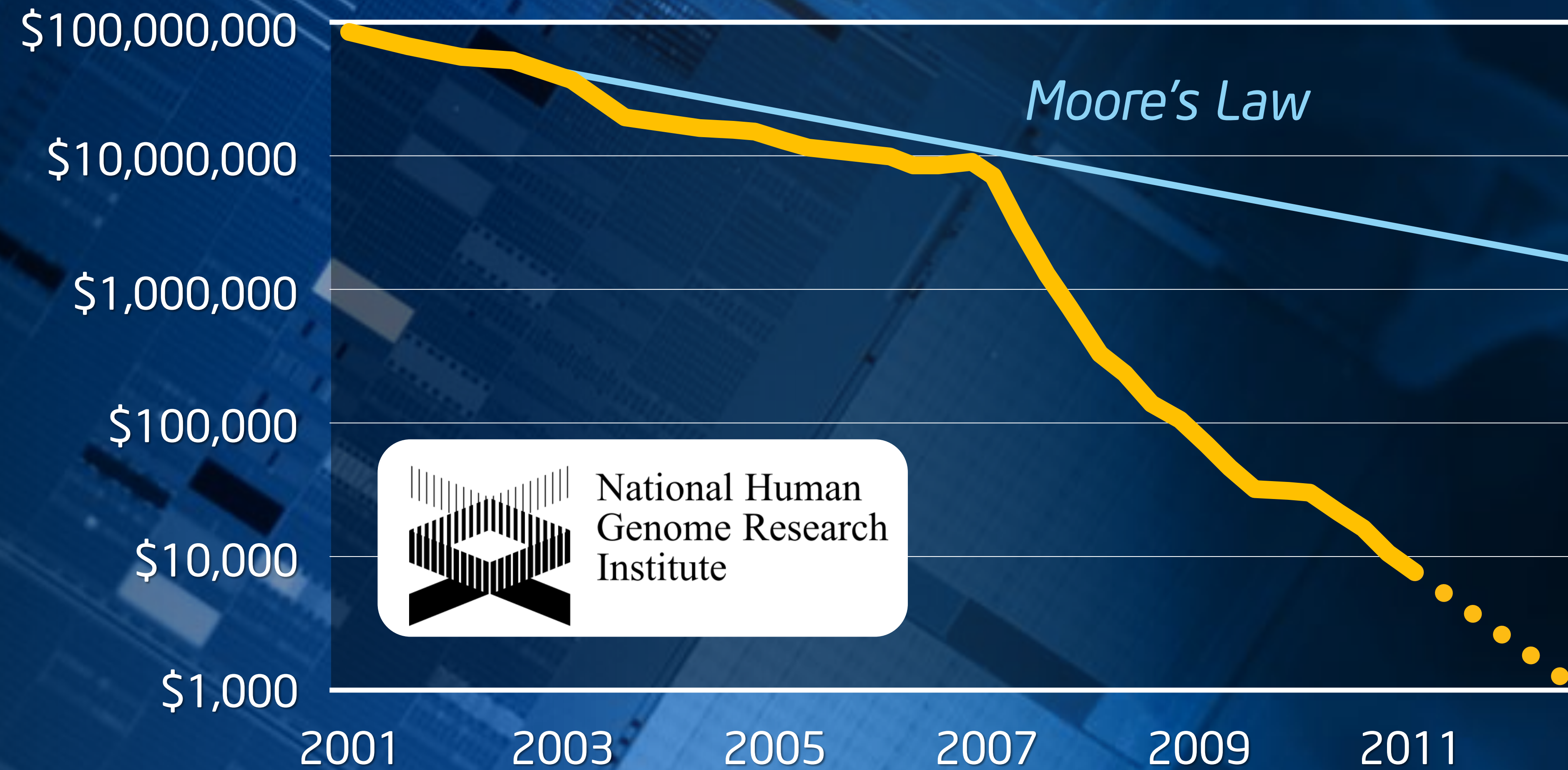


Changing Lives By
CUSTOMIZING CARE




Big Data
CHALLENGE

Reducing the Cost of Human Genome Sequencing



**\$1,000
GENOME**

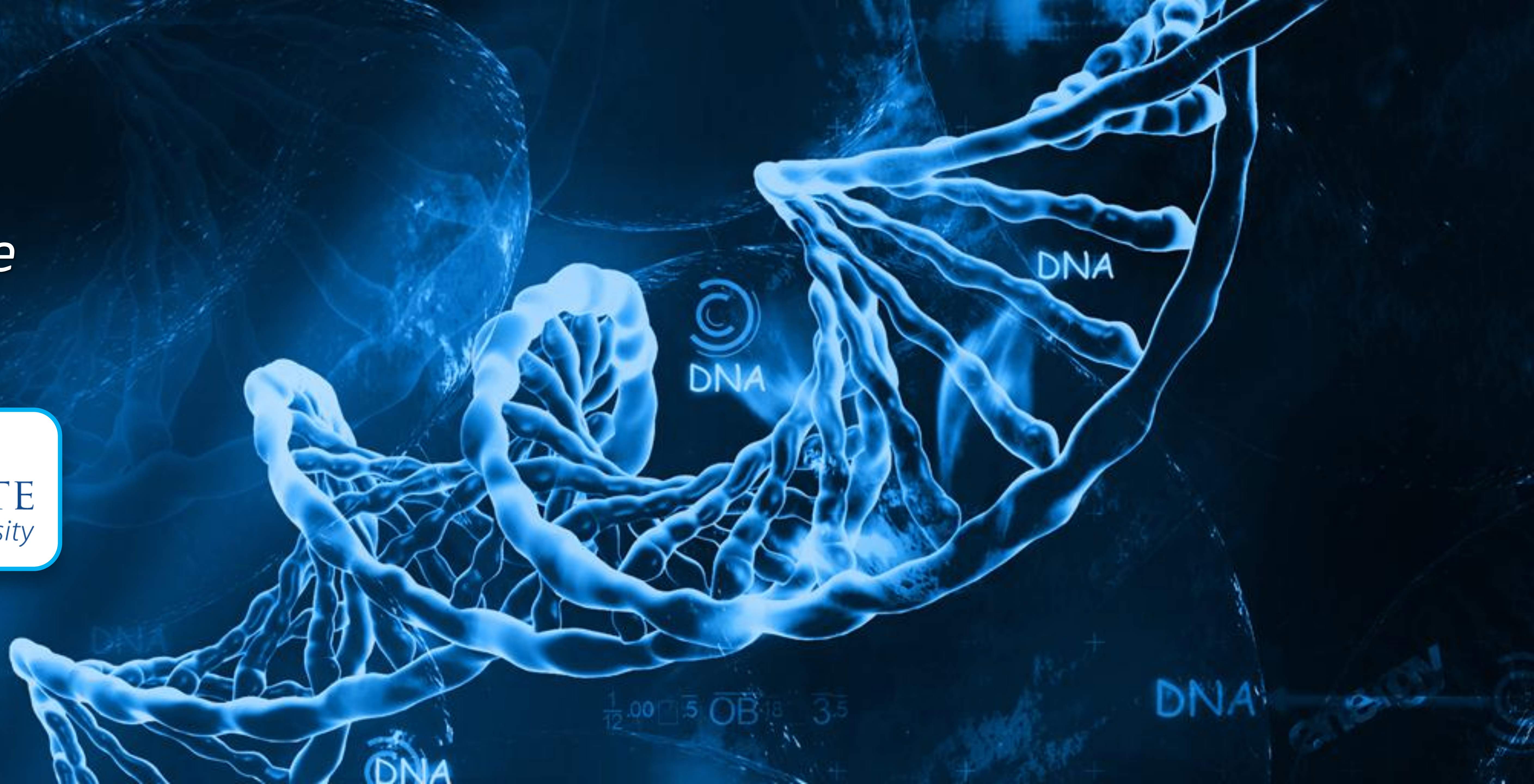


ONE THIRD of All Women
and **ONE HALF** of All Men
will be diagnosed with
CANCER

Creating a Searchable
DNA MAP

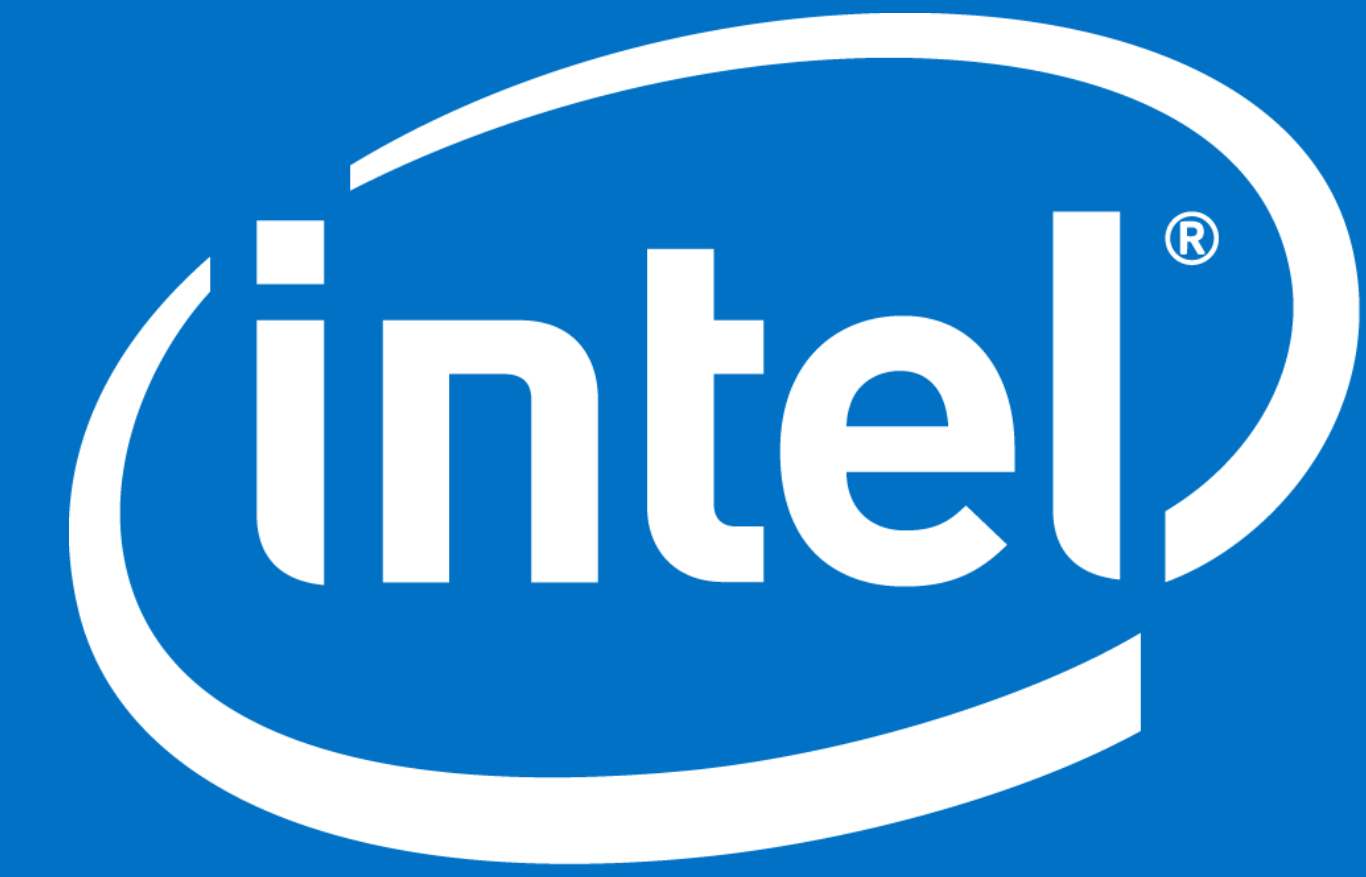


**KNIGHT
CANCER INSTITUTE**
Oregon Health & Science University



"... From a Biology Problem to a
Computational Problem ..."

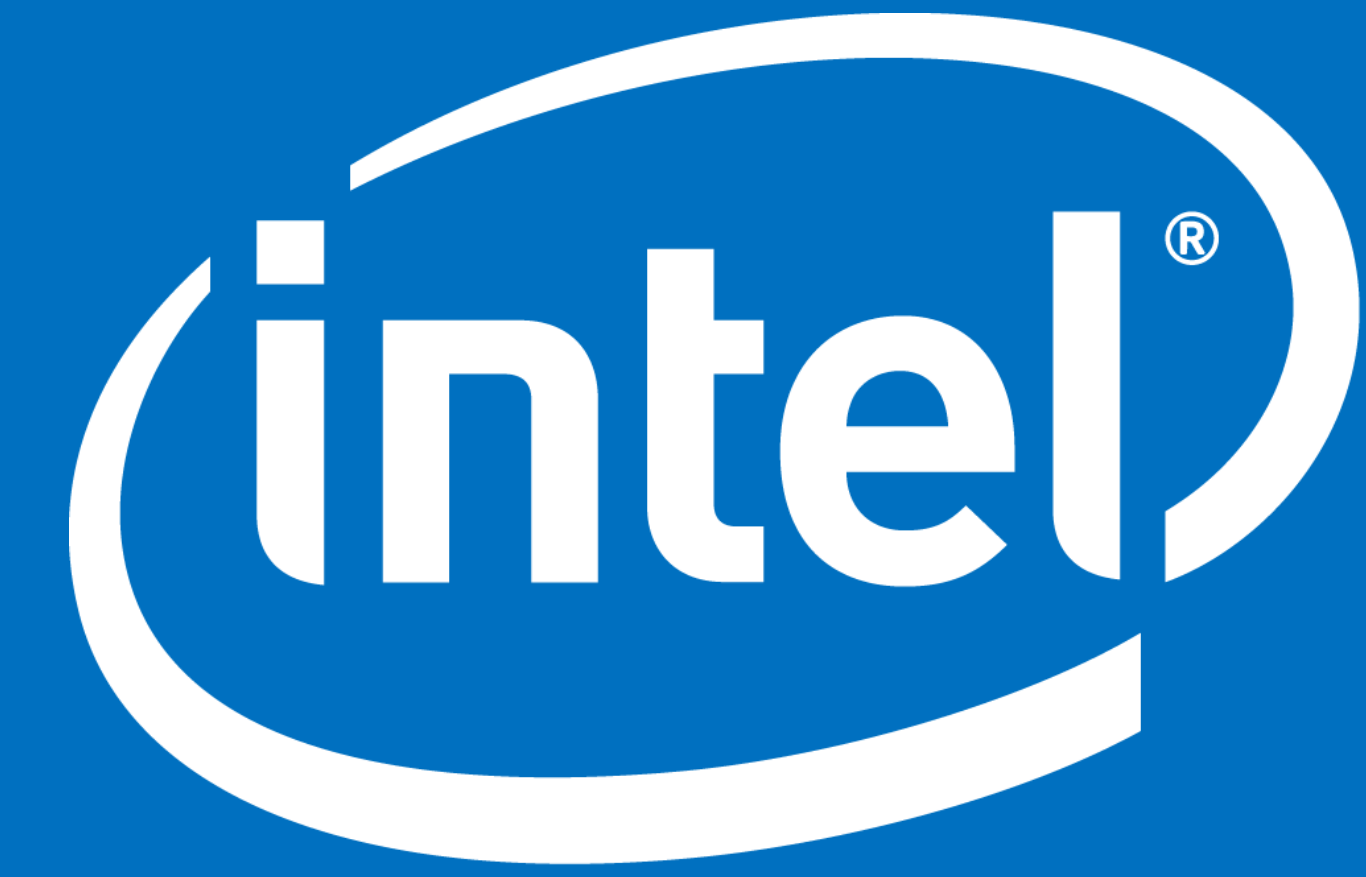




Look Inside.™

Eric Dishman
Intel Fellow, GM of Health & Life Sciences



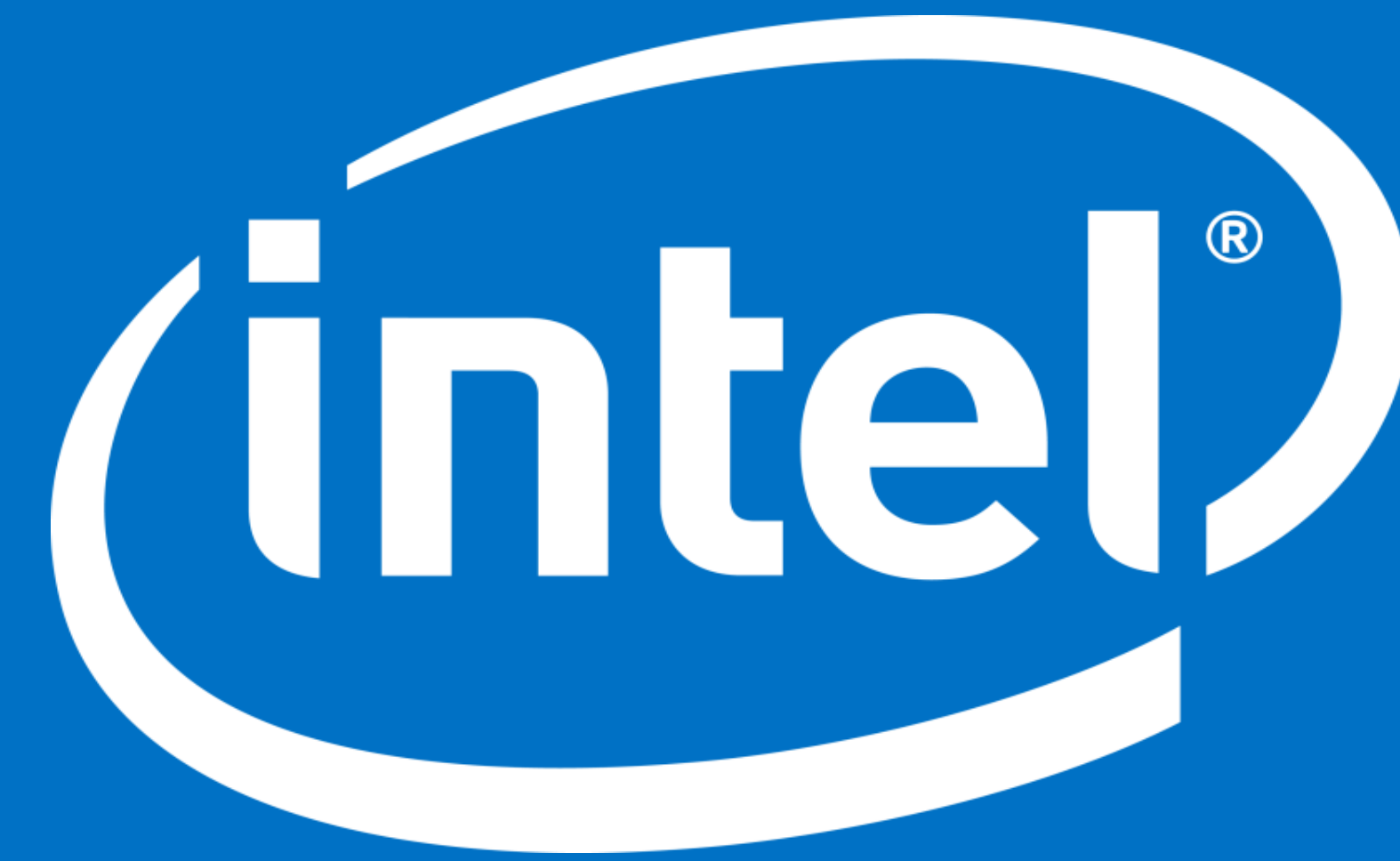


Look Inside.™

The image is a composite. The left side shows a blue-toned, geometric architectural structure with a grid-like pattern of beams and panels, receding into the distance. The right side shows a view of the Earth from space, with the planet's curvature and various landmasses and oceans visible against a starry background.

“Don’t be encumbered by history, go off and do something wonderful.”

Robert Noyce



Look Inside.™