

# **Harnessing the multifactorial Hallmarks of Disease to drive sales and brand growth.**

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**Greg Macpherson**  
Founder SRW Laboratories

# Talk summary

Back to the Future Part 1. 30 years in 30 seconds

Back to the Future Part 2. The next 30 years

Harnessing the 9 Hallmarks of Aging

Translating the Hallmarks of Anything

A functional medicine perspective

Validation

Brand, Provenance and Proof = Success

- **Graduated Pharmacy School** 1991
- **Founded Pharmacy One** 1996
- **Founded Pharmacy Direct** 1997
- **Founded MPS Ltd** 2005
- **Consultant and then CEO; MitoQ** 2012
- **Founder SRW Laboratories** 2020
- **Invited to Singularity U** 2022



**Back to the future.**

**Part 1.** 30 years in 30 seconds

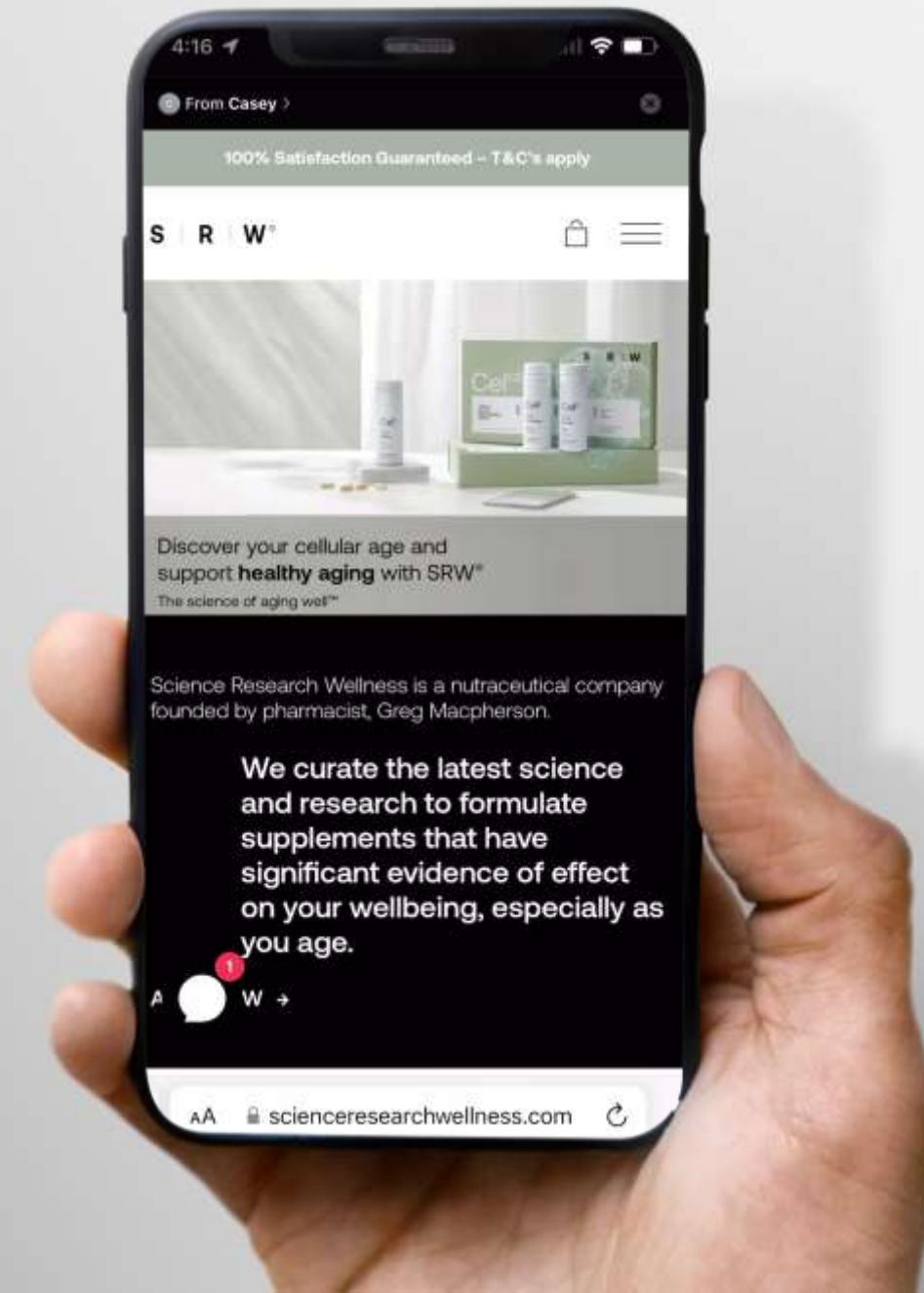


S | R | W®

The science of aging well



**Back to the future.**  
**Part 1.** 30 more seconds.



# Massive capital is going towards extending healthspan

All eyes on DNA reprogramming as the solution

Massive socioeconomic value unlocked when its achieved

Current thinking is that within the next 10-20 years we will solve it

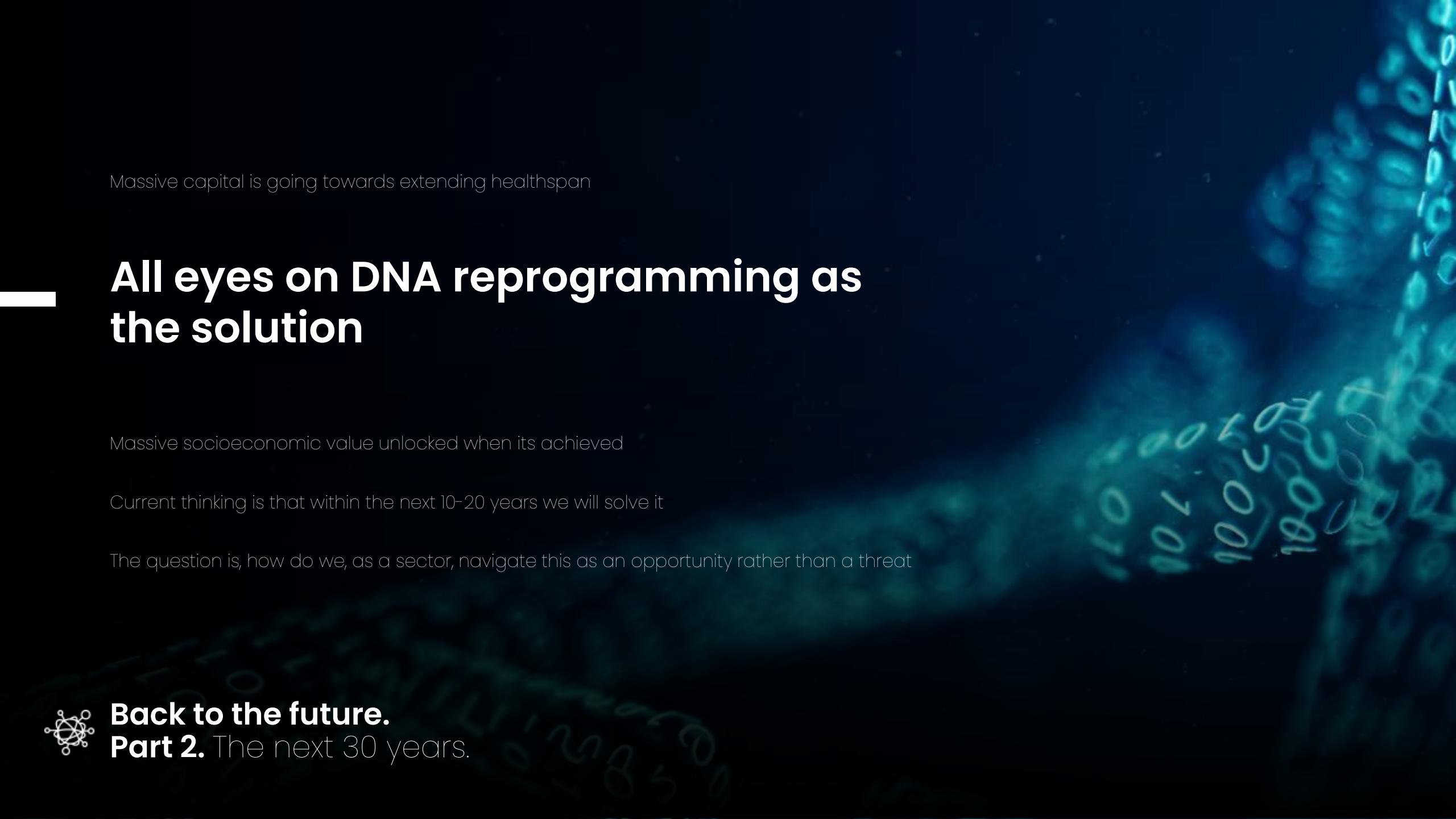
The question is, how do we, as a sector, navigate this as an opportunity rather than a threat



**Back to the future.**

**Part 2.** The next 30 years.





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**Back to the future.**

**Part 2.** The next 30 years.

A photograph of a young child with light blonde hair, wearing a light grey t-shirt, standing in a field of tall green grass and red poppies. The child is looking down at the ground. In the background, a person's hands are visible, also in the field.

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**Part 2.** The next 30 years.



**Harnessing the 9  
Hallmarks of Aging**

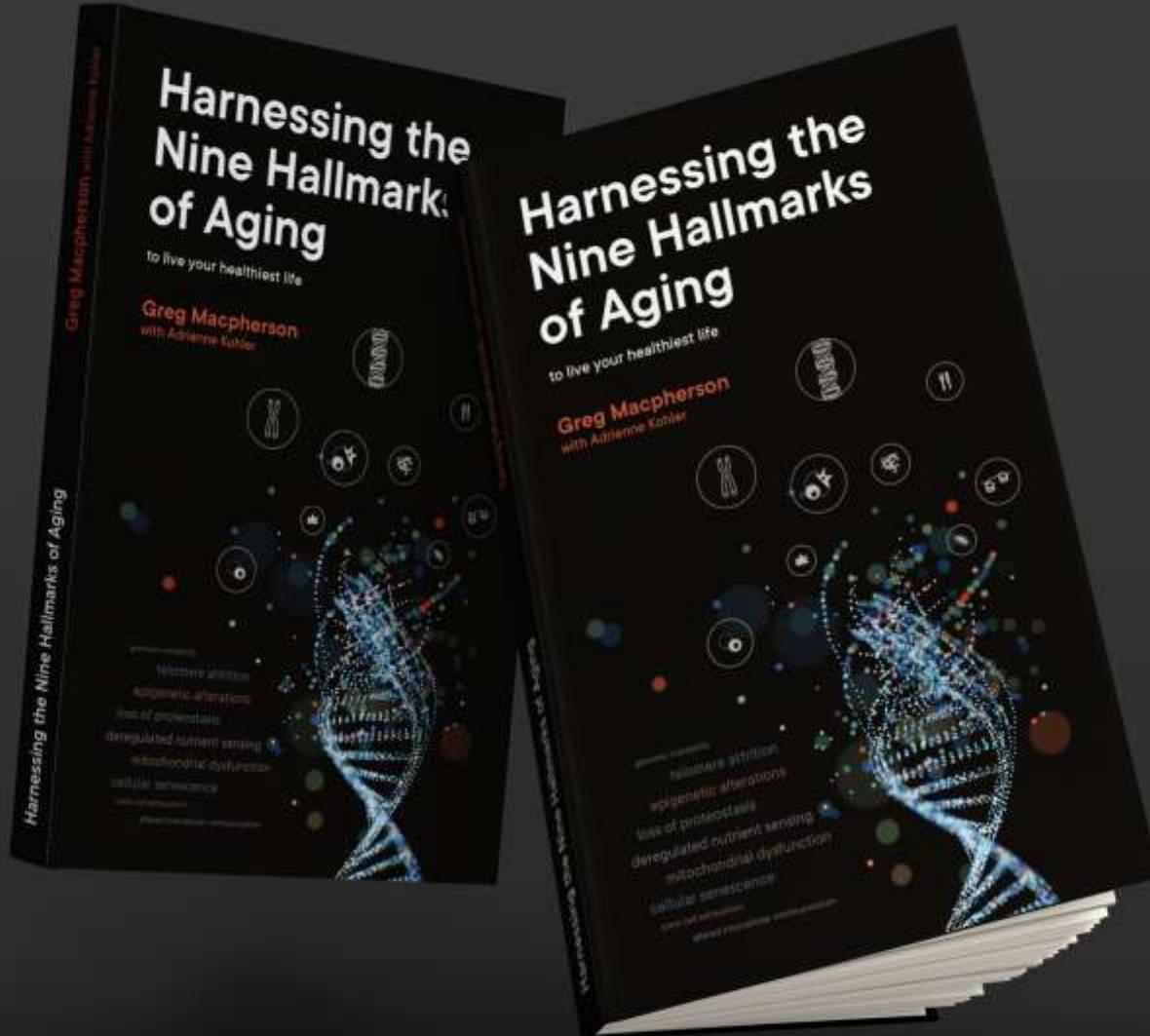


## Harnessing the 9 Hallmarks of Aging





## Harnessing the 9 Hallmarks of Aging





Translating  
the Hallmarks  
of Anything

REVIEW | VOLUME 144, ISSUE 5, P646-674, MARCH 04, 2011

# Hallmarks of Cancer: The Next Generation

Douglas Hanahan   • Robert A. Weinberg  Open Archive • DOI: <https://doi.org/10.1016/j.cell.2011.02.013>

Main Text

Acknowledgments

Supplement

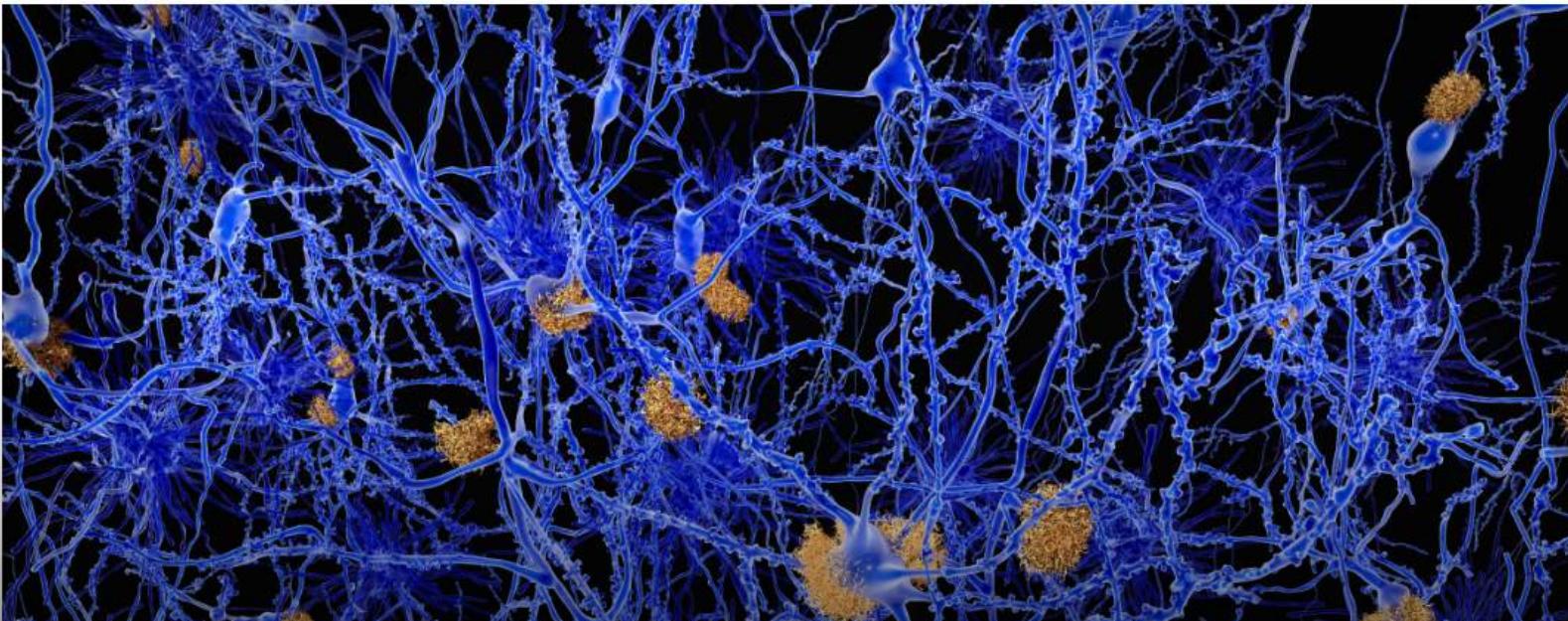
The hallmarks of cancer comprise six biological capabilities acquired during the multistep process of carcinogenesis. The hallmarks constitute an organizing principle for rationalizing the complexities of this process. These hallmarks are self-reinforcing, enabling cells to sustain proliferative signaling, evade growth suppressors, resist cell death, enable replicative immortality, induce angiogenesis, and activate invasion and metastasis. Underlying these hallmarks is the process of genomic instability, which generates the genetic diversity that expedites their acquisition, and inflammation, which fosters this process. In addition, the process of carcinogenesis is driven by the acquisition of two additional hallmarks: the ability to exploit developmental pathways and the ability to inhibit normal cellular senescence. The acquisition of these hallmarks in the last decade has added two emerging hallmarks of potential cancer causation: the ability to induce metabolic reprogramming and the ability to evade immune destruction.



## Translating the Hallmarks of Anything

# The Neuropathological Hallmarks of Alzheimer's Disease

AUGUST 24, 2021 | HENRY PECK



Translating the Hallmarks  
of Anything



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JOURNAL

journal homepage: [www.elsevier.com/locate/csbj](http://www.elsevier.com/locate/csbj)

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Mini Review

## Hallmarks of Aging in the Liver

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### ABSTRACT

While the liver demonstrates remarkable resilience during aging, there is growing evidence that it undergoes all the cellular hallmarks of aging, which increases the risk of liver aging-associated diseases. The aging process in the liver is driven by alterations of the genome and epigenome, leading to dysregulation of mitochondrial function and nutrient sensing pathways, leading to age-related liver disease and low-grade inflammation. These changes promote multiple phenotypic changes in liver cells (hepatocytes, liver sinusoidal endothelial, hepatic stellate and Kupffer cells) that compromise hepatic function. In particular, age-related changes in the liver sinusoidal endothelial cells are a significant but under-recognized risk factor for the development of age-related liver diseases.



Translating the Hallmarks  
of Anything



Proving the effects of health  
and wellness products.

 Validation





Validation



The next health frontier



Validation



**Brand, Provenance  
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# Thank you