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GEROFUTURES THINK TANKS

Insights and Inspirations 2021

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AFAR convened leaders from around the world, across the scientific, philanthropic, policy, and biotechnology sectors

- **22** Experts
- **11** Academic Institutions
- **7** Private Companies
- **3** Foundations

Bar-Ilan University
אוניברסיטת בר אילן

BIOAGE

UNIVERSITY OF BIRMINGHAM

University of Brighton

EINSTEIN
Albert Einstein College of Medicine

ΕΘΝΙΚΟ ΙΔΡΥΜΑ ΕΡΕΥΝΩΝ
National Hellenic Research Foundation

JOHNS HOPKINS
SCHOOL of MEDICINE

JUVENESCENCE

life
BIOSCIENCES

THE LONGEVITY FUND

MAYO CLINIC

NUS
National University of Singapore

UNIVERSITY OF OXFORD

SENISCA
Forward thinking to reverse cell ageing

THE UNIVERSITY OF SYDNEY

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Objectives

- Pose critical questions about the challenges and opportunities facing aging research

- Share insights on supporting the research pipeline, the future of therapeutics and moving geroscience from the labs into our lives

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Three Think Tanks

THINK TANK I

Supporting Basic Science and Geroscience

THINK TANK II

Inviting Investment in Gerotherapeutics

THINK TANK III

Preparing the Translational Research Pipeline

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Consistent, Major Recommendations

- An F.D.A. indication for aging with improved regulatory pathways
- International collaboration between private and public research sectors
- Increased interdisciplinary research on aging

The Key Questions

What is the most important area of research in the basic biology of aging?

What area of research is most likely to emerge as the ”next big thing”?

What particular strengths does your country have in basic biology of aging? What advantages can you see from international collaboration?

What is one real and/or perceived barrier to furthering the biology of aging and geroscience in your country, and how can we potentially address these?

The Discussion

- **Harnessing big data and artificial intelligence through epigenetics is key**
- **Uncovering the resiliency of centenarians**
- **F.D.A. acceptance of an indication for aging**
- **We need to arm researchers with detailed projections showing the economic benefits of increased healthspan**

"Some of the most exciting work is focused on humans. That's not to say that the work that's going on on other species isn't critically important. It is, absolutely. But if you're asking me what's likely to move in the direction of a therapeutic intervention, I think that the work going on in humans is some of the most critical work that's going on now."

- **Foster international collaboration**
- **Promote the idea of funding networks of labs (possibly across continents)**
- **Ramp up studies in centenarian subgroup of population**
- **Improve understanding that aging can be targeted**

WHAT'S NEEDED NEXT

The Key Questions

What biological discoveries are most likely to interest investors in longevity? Why do you think this?

What, if any, regulatory changes are needed to enhance the prospects of success for products or services that are developing from our enhanced understanding of the biology of aging, and why?

What should early-stage investors be looking for in a company to make it a good prospect, and why?

What is the hardest thing you have found about running a new company in the longevity or aging space?

The Discussion

- **Investors are interested in promising discoveries in the near team that address a key unmet need**

- **The F.D.A recognizing “aging” as an indication for therapeutics is key**

- **Work needs to be done to identify a practical clinical path forward**

“We’re looking at 200 companies a year to invest in 10 to 12 possible therapeutics. So our job is actually more about saying no, rather than saying yes.”

- **Advance the TAME Trial to open regulatory doors to drugs that target aging**
- **Build relationships with regulatory agencies to allow more efficient clinical trials**
- **Convene investors interested in longevity, regularly**

WHAT'S NEEDED NEXT

The Key Questions

What is the most important current area of research in the basic biology of aging for translation into the clinic, and why?

What is the most important current area of research for translation into the broader public health arena, and why?

With reference to your own country, what particular strengths does it have in translation in both clinical and public health areas? What are the advantages of international collaboration? What form should that take?

What are the biggest barriers to effective translation? How can we overcome them?

The Discussion

- **The field needs to demonstrate that what scientists have seen in animal models in the lab can translate to humans**
- **There's a lack of adequate funding and pharmaceutical industry support**
- **Focus on middle age and look for earlier predictive biomarkers of resilience**
- **We need to attract more young scientists to the field**

"There's so few clinical trials that are being done, and we have to assume a lot of them are going to fail. That's part of research and nothing to be afraid of... but you've got to bite the bullet and move into human trials to figure it out."

- **Create a central clearinghouse to share aging research worldwide and provide regulatory support**

- **Overcome barriers to international collaboration**

- **Move more promising interventions into early phase human clinical trials**

WHAT'S NEEDED NEXT

INVESTING IN GEROFUTURES

Strengthening the Aging Research Pipeline

Securing an Indication for Age-Targeting Therapeutics

Applying the Savings of Living Healthier, Longer