# National Institutes of Health 2019 Geroscience Summit Session Questions

## **Session I**

- 1. What have been the main accomplishments of the Geroscience Interest Group (GSIG) outside NIH?
- 2. What is the optimal balance between basic and translational efforts in geroscience?
- 3. Is research on aging biology strong enough already to support translation to specific diseases?
- 4. What is the balance between disease-specific and aging-related risks for specific diseases?
- 5. How do we envision the 'downstream' effects of geroscience on social and economic realms?
- 6. What are the main challenges (scientific, regulatory, financial, etc.) to further progress in geroscience?

# **Session II**

- 1. What diseases seem to be caused by deficiencies in the biology of aging? For example, what are the diseases caused by inefficient autophagy or increased cellular senescence?
- 2. What diseases seem to have a genetic basis that is uncovered by a hallmark of aging in human populations (and when using a laboratory animal to model the disease)?
- 3. How could you screen for interactions between disease-causing alleles and hallmarks of aging?
- 4. We rely on laboratory animals as proxies for human aging: How might you select better proxies based on the hallmarks of aging? Should the focus be on hallmarks of aging or diseases endemic to those animals?

## **Session III**

- 1. On Global Partnership, are there other platforms or programs in the EU that might benefit from collaborations on aging topics with the NIH and how might this be accomplished, not only in neurodegenerative disease but other diseases associated with aging, and with aging in general.
- 2. Specifically, with respect to the topic of aging and chronic disease are there topics that might be worked on collaboratively between global partners, NIH, and industry and professional associations?
- 3. On the work of the FNIH, what prospects are there for new projects with industry in the next 5 years that seem to be the most promising
- 4. Much research is being done at NIH on biomarkers in general and on aging: what topics are most ripe for new ventures working together in the next 5 yr.
- 5. How can NIH trans HHS partnerships extend to more sister agencies of the Public Health Service, such as the Administration on Aging, as well as with professional associations other than the traditional ones dealing with aging?

## Session IV and VI

- 1. To what extent does aging play a role in your disease of focus? Onset, severity, treatment?
- 2. Is there already a focus on the role of aging in research in your disease of focus?
- 3. What do you envision as a potential partnership with geroscience?
- 4. What can geroscience do to promote a partnerships (between disease-focused Societies or other)?
- 5. Can your organization engage its constituency in geroscience?
- 6. For societies with multiple focus areas, how can NIH partner with you to bring awareness of and to incorporate aging studies within the communities you serve?
- 7. What challenges do you envisage in an attempt to encourage research or studies in aging?
- 8. What research programs and initiatives does your organization currently support that can be modified or expanded to support studies on aging (as it interfaces with your condition of focus)?
- 9. How does the process of aging impact the condition or research area that you support?
- 10. What are barriers to incorporating studies of aging into ongoing society programs?
- 11. Are there opportunities for partnership with other societies to focus on a common theme of incorporating aging into chronic disease research?
- 12. Have you engaged in successful partnerships with NIH and other societies, if so, how might this be applied to studies on aging?
- 13. How can the NIH best facilitate collaborations/partnerships between different disease-focused Societies?
- 14. How can we best engage patients, patient advocates, and Society administrative staff in these efforts?

#### Session V

- 1. The goal of geroscience research is to improve healthspan. To achieve this goal, how do we prioritize the many vulnerable groups (e.g. Alzheimer's, osteoarthritis, Parkinson's, sarcopenia) that currently compete for the relatively small amount of available geroscience research funds?
- 2. What roadblocks prevent basic biomedical researchers from including an aging component in their current research projects and clinical trials? Should all future clinical drug trials require a study in aged populations?
- 3. Is there an expertise shortage in basic and translational geroscience research (especially in geroscience clinical trials)? How can aging advocacy groups advance the need for this expertise and at what stage of training?
- 4. Should there be a concerted effort to identify aging biomarkers, in addition to disease-specific biomarkers, for predisposed aging populations? If so, how can we accelerate this pipeline from biomarker identification to use in the clinic?
- 5. What government and non-government groups, including the FDA, should be included in future discussions on moving geroscience research to the clinic?
- 6. What geroscience therapies (mTOR inhibitors, senolytic drugs for example) are closest to being approved for general population use? What can we learn from an in-depth discussion of the impediments faced by the developers of these therapies as they advanced their clinical efforts?

#### **Session VII**

- 1. How you determine which hallmarks of aging to target for potential therapeutics? How do you select target for development of therapeutics? How do you select target for development of therapeutics? How often do one of the hallmarks of aging come under consideration?
- 2. On what basis do you link a disease with a hallmark of aging, and subsequently with a candidate therapeutic? Some of the hallmarks of aging are diseases
- 3. Do you need to consider the genetic basis for diseases when targeting hallmarks of aging as part of the treatment?
- 4. Why the emphasis on targeting cellular senescence in biotech?
- 5. Should there be greater consideration given to targeting hallmarks of aging as secondary therapies (or to ameliorate the side effects of primary therapies, such as chemotherapy for cancer) or as combined therapies (to boost efficiency of the currently used treatments)?

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