



A five-year initiative called **The New Map of Life™** was launched at an inaugural meeting at Stanford University on September 20 and 21, 2018. The goal of the initiative is “to envision a society that supports people to live satisfying, engaged and financially secure lives for 100 years,” said Professor Laura Carstensen, Director of the Stanford Longevity Center, who noted “we cannot achieve what we can’t envision.”

The meeting convened a group of more than 50 distinguished leaders from the public, private and non-profit sectors along with top scholars to address how to achieve high-quality, century-long lives. Discussions among experts and across sectors, interspersed with short talks and panel discussions, resulted in identifying key issues and questions to which answers are needed to guide research and inform public policies.

Discussions focused on seven domains—early life, education, health, work, financial security, environment and social influences—were considered through the lens of government and public policy, science and technology, gender and social status, disability, culture, and social norms. Participants at the meeting, which was co-sponsored by the Stanford Center on Longevity, the Stanford Institute for Economic Policy and Research and the Stanford Center for Population Health Sciences, sought to better understand how these areas intersect and impact each other as people live very long lives.

This paper summarizes some of the key themes, new models and solutions which emerged from the interdisciplinary conversations about the challenges for the current life course and what needs to change for a high-quality century-long life. The next steps for The New Map of Life™ initiative will involve an intensive examination of key themes identified at the September meeting and a broad communications strategy aimed at changing the global conversation from one about the crisis of aging to one about long life and proactive planning for century-long lives. The initiative will also lead further national and international meetings and collaborations to build on the research and the recommended scientific, behavioral and cultural changes. The initiative will draw on the expertise and enthusiasm of the participants at the launch meeting, alongside a broader group of experts who will help to frame the direction and priorities for the initiative.

## **A Growing and Urgent Challenge**

Demographic changes alone demand attention. World population, currently 7.6 billion, is projected to reach 8.6 billion by 2030 and 9.8 billion by 2050. The current three-stage linear model of life—education, then work

followed by retirement—won't work. The new life course will need to be flexible and have multiple stages with a variety of careers and transitions. Seismic societal changes will be needed, including new models of education and lifelong learning, new policies for health care and financial security and a redesign of where and how we live and work.

To fully reap the gift of longevity and the growing possibility of living well to the age of 100 and beyond, a new map of life is needed from early to late life. At the meeting, consensus emerged around several key issues summarized below:

### **Intergenerational engagement and partnerships are key to realizing the opportunities of longevity**

The complexity of changes needed to achieve high-quality longer lives requires overcoming age segregation and fostering more intergenerational connectedness. Multigenerational housing will offer new avenues for family members of all ages to remain healthier, more socially engaged and financially secure. Classrooms that include both young and older students can spark creative and critical thinking. And as employees stay in the workplace longer, more work will be done by multigenerational teams, which in some cases are likely to be more productive. Research is needed to identify ways in which intergenerational partnerships can improve quality of life over the course of century-long lives.

### **The new map of life demands a new narrative**

There was broad agreement that new language and imagery are needed that values people at different stages of life. We need a narrative that redefines what it means to be “old” and conveys the dramatic heterogeneity represented in older populations. Rather than emphasizing chronological age and generational labels, we need a narrative that focuses on strengths and needs. Media outlets, advertisers and entertainment industries can play an important role by sharing stories and creating new imagery and content about longevity and aging.

### **Economic, educational, racial and other inequities must be addressed**

We need to seek solutions for the widening gap in income and wealth, which results in sharp differences in life expectancies and diverging experiences of aging. New practices, supports and products that keep children and adults healthy and socially engaged throughout their lives will require a wide reach so the *majority* of people—not just the privileged few—reach advanced ages physically fit, mentally sharp and financially secure.

### **Technology can facilitate the opportunities of century-long lives while also posing challenges**

Technological advances are influencing and changing education, work, family relations and all other domains that shape people's lives. We need to better understand how social media and internet usage shapes children's brains and affects cognition among the elderly, how they undermine or foster social connectedness and how they affect older employees who want and need to work longer. And we need to conceive of ways that people can best accommodate the increasingly rapid pace of technological change.

## **Early childhood**

Policies and programs aimed at healthy aging need to more fully appreciate the link between early and late life, with public and private resources flowing simultaneously to very young and older people. Young children today and in the future will likely have multiple educational experiences and careers and perhaps multiple marriages, but they will only have one “first 1,000 days.” That time is crucial because the determinants of future health begin early in life.

Quality pre-kindergarten and early-start programs need to be ubiquitous. And children can be helped to develop a strong sense of self early in their lives so they are resilient and able to handle the multiple transitions they’ll face over a long life.

## **Education**

Children likely to live to 100 and beyond need education that will enable them to thrive in an age of rapid knowledge transfer and change. In addition to reading, math and computer literacy and an understanding of global trends, they should be challenged to be nimble and flexible, to think creatively, and to get along with others from diverse backgrounds.

The current model of learning, in which learning anxiety is rampant and ends abruptly at age 22 or earlier for those who don’t obtain college degrees, often doesn’t provide individuals with the skills and knowledge they need to make work transitions and be financially secure. Research already points to ways to support new teaching approaches but more data and research are needed about an array of educational models, including work/study programs, vocational training, the value of intergenerational classrooms and older people mentoring and helping to guide children in schools. Individuals, educators and policy makers will be wise to promote affordable lifelong learning that doesn’t always take place in classrooms but occurs at regular intervals throughout century-long lives.

## **Health**

Improving healthy aging with affordable, accessible and appropriate health care is an essential component of the new map of life which intersects with work, financial security, social connectedness and other domains. The best and perhaps only way to create a sustainable health system is to keep people out of it whenever possible by ensuring they stay healthy. It’s about a focus on more preventative care and treating chronic illnesses and also delivering more care outside of hospitals in communities and homes.

Eradicating child obesity and tobacco and opioid drug use will greatly improve healthy aging. So will medical and technological advances: investing in genomics will help to predict and identify diseases at early stages when they are most curable. Telehealth care can enable people to live independently for longer with reduced health-care costs.

As people come to live out their full lives, it’s time to ask what it means to have a “good death.” It is essential that we encourage discussions about when, where and how we die.

## **Work**

The traditional model of spending an entire career at one company that provides training along with health and retirement benefits is becoming obsolete. Employees increasingly transition among multiple employers or work independently in the gig economy, funding their own health insurance and retirements. Repeatedly, workers will require job retraining as new technologies demand new skills and, in some cases, replace jobs.

Going forward there is every reason to expect heightened fluidity, including more zigzagging in and out of the job market by workers caring simultaneously for young children and elderly parents and a greater presence of older employees who work steadily through their 60s, 70s and 80s. In the new map of work, a 33-year-old manager may “retire” for ten years to raise his children, then go back to school to train for a new career that he pursues until he’s 70, and then launch an encore career.

Corporations have been slow to acknowledge an aging and multigenerational workforce, partly because they fear potential accusations about age discrimination. In the meantime, we have much to learn about ways in which multigenerational workforces may contribute to productivity.

## **Financial Security**

With pensions becoming rare and the future of Social Security benefits in question, individuals are increasingly responsible for their financial futures. Americans whose employers don’t offer retirement plans are especially vulnerable. So are women who spend fewer years on average in the labor force than men due to childcare and elder care responsibilities and therefore accumulate lower retirement savings than men, whom they typically outlive. Moreover, policies are needed to address and shrink the widening longevity income gap: currently the top five percent of earners can enjoy very comfortable longer lives but the vast majority struggle to cover food, housing and medical costs.

Here too, improved education is important. Yet few states require financial education in primary school and few colleges teach basic financial literacy. Even financial planners can fail to appreciate the need to plan for very long lives. Steeper medical costs in old age and out-of-pocket individual expenditures for Medicare costs of long-term care place additional demands on financial resources.

## **Environment**

The environments in which we live will help or hinder the promise of longevity. The future needs more affordable multigenerational housing—and tax incentives to spur building it—and more integrated transportation systems, especially in rural and small and mid-sized urban settings. Long commutes between home and work are stressful and limit time for families and friends.

Most Americans today express a desire to “age in place,” with many viewing relocations as personal failures. There is a need for alternative housing models that offer blends of community living and institutional support. Senior communities built in close proximity to cultural venues, stores, and restaurants while providing a range of services may reduce social isolation. Multi-generational communities may help to provide what families provide when geographically proximal.

At a more distal level, climate change presents challenges to longevity as well. Rising temperatures, more and bigger wildfires, hurricanes and other disasters adversely harm older people and young children more than other age groups. It is time for considered reflection about interactions that arise between individuals and their environments and how they impact long and healthy lives.

## **Social Influences**

There is a lack of social structure for many in their later years, with individuals at advanced ages forced to redesign their lives on their own. Participation in the paid workforce is valued more than volunteer engagement. And while many communities used to be more naturally intergenerational, people today are more socially isolated – despite or perhaps because of their increased use of social media. Regardless of age, people need a feeling of belonging, purpose and worth.

There is a need to revive communities with new programs and vibrant brands of community centers, shared community resources, technology-enabled communications, and norms that promote volunteerism, second careers such as those promoted by Encore.org, and purposeful endeavors.

**Julia Randell-Khan and Carol Hymowitz**

Fellows, Stanford Center on Longevity

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## Attendees at The New Map of Life meeting | September 20- 21, 2018

### **Deborah Abele**

Annenberg Foundation

### **Michele Barry**

Stanford University

*Senior Associate Dean for Global Health, School of Medicine; Director, Center for Innovation in Global Health; Professor of Medicine and Tropical Diseases*

### **Jay Bhattacharya**

Stanford University

*Professor of Medicine; Director of the Stanford Center on the Demography of Health and Aging*

### **Tim Brown**

USAA

*Director of Designing Member Experiences at USAA*

### **Kate Bundorf**

Stanford University

*Associate Professor of Health Research and Policy; Chief, Division of Health Services Research; Stanford Health Policy Fellow*

### **Laura Carstensen**

Stanford University

*Professor of Psychology and the Fairleigh S. Dickinson Jr. Professor in Public Policy; Director, Stanford Center on Longevity*

### **Christine Cassel**

UCSF School of Medicine

*Presidential Chair and Visiting Professor; Former President & CEO of the American Board of Internal Medicine (ABIM)*

### **Deland Chan**

Stanford University

*Professor of Urban Studies; Assistant Director of Urban Studies for Community Based Learning and the Human Cities Initiative*

### **Carrie Cihak**

King County, WA

*Chief of Policy, King County, WA; Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University*

### **Jonathan Collie**

The Age of No Retirement

*Medical doctor & co-founder of The Age of No Retirement in the UK*

### **Mark Cullen**

Stanford University

*Professor of Medicine, Biomedical Data Science and Health Research & Policy; Director of the Center for Population Health Sciences*

### **Martha Deevy**

Stanford Center on Longevity

*Associate Director; Director of the Financial Security Division; Senior Research Scholar*

### **Mark Duggan**

Stanford University

*Wayne and Jodi Cooperman Professor of Economics; Director of the Stanford Institute for Economic Policy Research (SIEPR)*

### **Ric Edelman**

Edelman Financial Services

*Chairman and co-founder of Edelman Financial Services; Host of a weekly personal finance talk radio show, the Ric Edelman Show, syndicated by Syndicated Solutions*

### **Andrew Elder**

Edinburgh University

*Professor of Medicine, Geriatrics; Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University*

**Katy Fike**

Aging 2.0

*Founding partner of Generator Ventures and co-founder of Aging2.0, a global innovation network and startup accelerator program; a PhD gerontologist, former investment banker and systems engineer*

**Marc Freedman**

Encore.org

*President and CEO of Encore.org; Social entrepreneur, thought leader and writer*

**Dale Garell**

USC

*Emeritus Clinical Professor, Pediatrics*

**David Gensler**

Gensler

*Former co-CEO of Gensler*

**Gopi Shah Goda**

Stanford University

*Senior Fellow and the Deputy Director at the Stanford Institute for Economic Policy Research (SIEPR); Faculty Research Fellow at the National Bureau of Economic Research and Fellow of the Society of Actuaries*

**Russ Hill**

Halbert Hargrove Global Advisors LLC

*CEO & Chairman Halbert Hargrove Global Advisors; Member, Advisory Council, Stanford Center on Longevity*

**Paul Irving**

Milken Institute

*Chairman of the Milken Institute Center for the Future of Aging; Chairman of the board of Encore.org; Distinguished scholar in residence at the University of Southern California (USC) Davis School of Gerontology*

**Rob Jackson**

Stanford University

*Michelle and Kevin Douglas Provostial Professor and chair of the department of Earth Systems*

**Jerry Jacobs**

University of Pennsylvania

*Professor of Sociology*

**Kate Jerome**

Insight Editions Publishing

*President*

**Jim Johnson**

Johnson Capital Partners

*Chair, Advisory Council, Stanford Center on Longevity; Chairman, Johnson Capital Partners; board member of Goldman Sachs Group; Chairman Emeritus of The Kennedy Center and The Brookings Institution*

**Robert Kaplan**

Stanford University

*Adjunct Professor of Medicine, Stanford School of Medicine Clinical Excellence Research Center (CERC); former Chief Science Officer, US Agency for Health Care Research and Quality; Distinguished Emeritus Professor, Health Services and Medicine, UCLA*

**Cinny Kennard**

Annenberg Foundation

*Executive Director of The Annenberg Foundation; Former Senior Vice President in charge of Programming at the Smithsonian Institution*

**Jodee Kozlak**

Kozlak Capital Partners

*Founder and CEO Kozlak Capital Partners; Previously Global SVP of HR at Alibaba Group and EVP and CHRO at Target Corporation; Member, Advisory Council, Stanford Center on Longevity*

**Iris Litt**

Stanford University  
*Marron and Mary Elizabeth Kendrick Professor in Pediatrics, Emerita*

**Hazel Markus**

Stanford University  
*Davis-Brack Professor in the Behavioral Sciences*

**Pat Milligan**

Mercer  
*Senior Partner and Global Leader, Multinational Client Group; Former President, Mercer's North America region, 2012 – 2015*

**Arnie Milstein**

Stanford University  
*Professor of Medicine; Director, Stanford Clinical Excellence Research Center*

**Sanjiv Mirchandani**

Fidelity  
*President, Fidelity Clearing and Custody Solutions*

**Haig Nalbantian**

Mercer  
*Senior partner, co-founder Workforce Sciences Institute*

**Lis Nielsen**

National Institute on Aging  
*Chief of the Individual Behavioral Processes (IBP) Branch in the Division of Behavioral and Social Research (BSR) at National Institute on Aging (NIA)*

**Lark Park**

Member, Board of Regents, University of California  
*Director, California Education Learning Lab, Governor's Office of Planning and Research; Former Senior Advisor for Policy for Governor Brown*

**Phil Pizzo**

Stanford University  
*Founding Director of the Stanford Distinguished Careers Institute; Former Dean of Stanford School of Medicine; David and Susan Heckerman Professor of Pediatrics and Microbiology and Immunology*

**Denise Pope**

Stanford University  
*Senior Lecturer, Graduate School of Education; Co-founder of Challenge Success*

**Julia Randell-Khan**

Stanford University  
*Fellow, Stanford Center on Longevity; senior fellow Encore.org; former attorney and partner fellow Stanford Distinguished Careers Institute*

**Cecilia Ridgeway**

Stanford University  
*Lucie Stern Professor in the Social Sciences and, by courtesy, of Education, Emerita*

**Francesca Rinaldo**

Stanford University  
*Postdoctoral Fellow at the Clinical Excellence Research Center (CERC) at Stanford School of Medicine*

**Tom Robinson**

Stanford University  
*Irving Schulman Professor in Child Health; Professor of Medicine (Stanford Prevention Research Center)*

**John Rother**

National Coalition on Health Care  
*President & CEO of the US National Coalition on Health Care (NCHC); Previously EVP for Policy, Strategy and International Affairs at AARP; Former Chief Counsel, Senate Committee on Aging*



**Andrew Scott**

London Business School

*Professor of Economics and Former Deputy Dean at London Business School; Fellow of All Souls, Oxford University and the Centre for Economic Policy Research*

**Sara Singer**

Stanford University

*Professor of Medicine; Professor (by courtesy) at the Stanford Graduate School of Business and Freeman Spogli Institute*

**Aaron Smith**

YI Advisors

*President of YI Advisors, the consulting arm of Young Invincibles, a leading US youth advocacy organization. Co-Founder, Savi, a social impact platform helping borrowers tackle their student debt*

**Jeremy Smith**

Rainwater Foundation

*Vice President and Executive Director, Charitable Services*

**Myra Strober**

Stanford University

*Labor Economist and Professor Emerita at the School of Education; Professor of Economics at the Graduate School of Business (by courtesy)*

**Linda Tarplin**

Tarplin, Downs and Young

*Co-Founder, Tarplin, Downs and Young; Former White House liaison to Congress on health care issues; Senior positions in the White House and the Department of Health and Human Services; Member, Advisory Council, Stanford Center on Longevity*

**Matt Weber**

Swiss Re

*Former Chief Underwriting Officer, Swiss Re; board member CyberCube Analytics*

**Paul Wise**

Stanford University

*Richard E. Behrman Professor in Child Health and Society; Professor of Pediatrics and Health Policy*