# Aging and Longevity in Montana

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### The Data: Montana Over the Next Decade



Ceniels Shorida Toole Hill 67.1 35.0 Valley 24.2 27.7 Refread Blaine Receival Phillips, Ponden 35.5 25.5 248 ----39.0 Teton Chouteau Richland 34.2 35.9 37,7 41.3 Forgus Dawson Garfield 33.7 36.1 34.3 43.8 Meache 30.6 37.6 Fallor 28.4 26.7 Custer 32.9 34.3 3855 27.4 Carter Powder River 40.9 Madison 36.4 Carbon 24.0 42.8 36.9 37.1 32.2

MONTANA 2025

By the year 2025, there will be only 14 counties in Montana whose 60 and older populations are under 30% of their total population. And the number of counties whose 60 and older population has grown to over 40% will be 11. Those counties with less than 30% have either reservations or larger cities.





42.0

# **MSU Longevity Initiative Concept**

The population of aging adults in Montana is growing. With that growth is the opportunity to redesign our later years with innovation in the educational, physical and mental spheres. Improvements in longevity begin with the practices we learn in college and continue over the ages. We will examine feasibility of a research center that improves longevity via innovations in design, engineering, telemedicine, driving and healthcare, along with a focus on the arts and recreation.

Source: MSU Program Planning Document



# Background

- Faculty and staff convened by Vice President Renee Reijo Pera to assess interest in creating a Longevity Institute
- Environmental scan conducted by Division of Health Sciences and the Montana Office of Rural Health/Area Health Education Center
- Review of research and outreach activities at MSU
- National and state models and data



# Opportunity

- Interest across the MSU campus and disciplines 72 survey responses from faculty and research project administrators
- At least 25 currently funded longevity related research projects
- Extensive outreach activities to enhance well-being and improve life for the aging population
- Opportunities for MSU to
  - 1) Impact long life
  - 2) Inspire change
  - 3) Link academics to other change makers
  - 4) Foster research and solutions



## Structure

- Support the work of current and future MSU scientists
- Catalyze basic and translational research on longevity through targeted strategic initiatives
- Provide value to Montana through outreach and community engagement
- Categorize research and outreach into key theme areas
- Identify champions and spotlight faculty researchers
- Develop translational projects
- Serve as an information source
- Engage communities along with key state and national stakeholders



### Longevity Initiative Environmental Scan 2017 Major Themes

Reported Research Transportation/Mobility Financial Planning Mental Health Food and Nutrition Outreach/Education Health Services, Workforce Life History Biology/Aging Process Rural - Infrastructure, agriculture, history, health and services

#### Outreach

Transportation and Mobility Financial Planning Mental Health Food and Nutrition Outreach/Education/ Community Development Healthcare Services Health Workforce Research Needs Transportation/Mobility Nutrition Biological: Aging Process/ Disease Well-being American Indian Rural & Agriculture Healthcare Delivery Financial Translational Demographics and Epidemiology



# Potential Themes for Longevity Institute





# Well-being

#### CDC Definition www.cdc.gov/hrqol/wellbeing.htm#three

- Physical well-being
- Economic well-being
- Social well-being
- Development and activity
- Emotional well-being
- Psychological well-being
- Life satisfaction
- Domain specific satisfaction
- Engaging activities and work

### **MSU Research Topics**

- Food and nutrition
- Outreach
- Community Development
- Rural infrastructure
- Mental Health
- Financial Security
- History/Agriculture



## Education

Potential for all research and outreach interests at MSU

### Audiences

- Researchers
- Policy Makers
- Patients and Families
- Healthcare and Aging Services Workforce
- Students
- General Public
- Government and Non-Profits

### Venues

- Website information, toolkits, research summaries
- Innovation Roadshow 10 x
  10
- Summer Institutes
- Webinar Series
- Newsletter



# Mobility

#### Example: Stanford Longevity Institute

### **MSU Research Areas**

"The mission of the Mobility Division is to focus on challenges to physical movement across the life span. The goals of the Division are first, to address fundamental issues by supporting research in areas ranging from biology to the design of the built environment and second, to help translate the fruits of that research into products and policies that sustain or enhance mobility or develop accommodations for those individuals with limited mobility."

- Transportation
- Built environment
- Physical health
- Engineering and aging population



## **Bioscience and Aging**

Example: Alliance for Aging Research www.agingresearch.org/posts/view/136#.WiblyYanG70

- "The journal Cell recently published an<u>article titled</u> "Geroscience: Linking Aging to Chronic Disease." It was authored by some of the leading lights in the field of geroscience. For those of you who are not familiar with the term, geroscience is the study of aging and agingrelated diseases. It is a relatively new term, but it's rooted in aging research, which has been going on for decades."
- The article outlines the recent developments in the field of aging research and explains how experts are finding that aging is the prevalent risk factor for most diseases that limit healthy years of life. Spurred on by this research, the National Institutes of Health launched the <u>Trans-NIH Geroscience Interest Group</u> in 2013 and held a <u>geroscience summit.</u> Noting that the elderly population is dramatically increasing, the article's authors said more attention needs to be placed on aging research.

#### **MSU Research Areas**

- Biomedical research with American Indian populations
- Redox biology and endogenous antioxidant systems
- Chronic disease
  - Dementia
  - Alzheimer's
  - Diabetes
  - Osteoarthritis
- Longevity in animal and insects



# **Typical Structures**

- Website presence
- Mission and description of purpose
- People
  - Faculty affiliates
  - Leadership
  - Administrative structure
  - Advisory Council

- Research associated with longevity
- Divisions, centers, focus area, themes
- Conferences and events
- Courses
- Outreach



# Next Steps

- Identify champions
- Strategic planning
- Develop organizational structure for potential Institute
- Sponsor educational events
- Engage with key stakeholders



# Many Thanks

To our faculty who do not miss an opportunity to plan for a better future for the people of Montana, across diverse background.



