

## GLOBAL CULTURES OF AGEING: ATTITUDES TO AGEING AROUND THE WORLD

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Attitudes to age are multidimensional. Previous research has suggested that people can hold seemingly contradictory views on older people, attributing both positive and negative attributes to them. In order to further explore these issues we used data from the 6th wave of the World Values Survey. This covered over 90,000 respondents from 60 countries worldwide. Respondents were asked to rate a number of statements about older people, e.g. older people are a burden on society. We performed a cluster analysis based on these statements to see whether we could identify groups of people who shared similar ideas about older people. The results revealed 4 clusters: age-neutral (9.9%), age-injustice (69.7%), age-positive (3.7%) and age-negative (16.6%). However, the distribution of these clusters varies widely cross-national differences, e.g. the age-positive cluster ranges from 0% in Chile to 19% in Rwanda. The results suggest there are various global cultures of ageing.

## EXPANDING THE GERONTOLOGICAL IMAGINATION THROUGH THE INTERSECTION OF ETHNICITY AND OLD AGE

S. Torres, *Department of Sociology, Uppsala university, Uppsala, Uppsala Lan, Sweden*

The starting point for this presentation is social gerontology's theoretical deficit as far as understandings of ethnicity are concerned. Through a scoping review of the literature published over the past twenty years (n=300+ articles), this presentation will present the challenges that this scholarship is facing. These have to do with lack of analytical clarity; sampling and methodological tendencies; reliance on stagnated understandings; context-obliviousness and the lack of a research agenda that specifically aims to advance our understanding of this very intersection. Through allusions to the debates that have received the most attention (on health, intergenerational relationships and caregiving as well as health and social care), this presentation will argue that failure to address these challenges is inhibiting the social gerontological imagination on ethnicity from being developed.

## A VIEW OF AGEING FROM IRAN: INTRODUCING THE IRANIAN LONGITUDINAL STUDY ON AGEING (IRLSA)

N. Aminisani, *Tabriz University of Medical Sciences, Tabriz, Azarbayjan-e Sharqi, Iran*

The age distribution of Iran is rapidly ageing; soon we will face the challenge of an ageing population. Cohort studies are very scarce and not responding to the ageing challenge in Iran. Therefore, the "Iranian Longitudinal Study on Ageing" (IRLSA), has been designed to comprehensively assess the different aspects of ageing, to monitor the changes in health and well-being, and to examine the different needs during the ageing transition. We have based the IRLSA on

the "Healthy ageing" framework, trying to assess a range of different biomarkers, lifestyle and socioeconomic factors as well as healthcare indicators. The project consists of two main components; IRLSA-General, IRLSA DEEP (gene-environment interaction). The enrolment phase was commenced in December 2016 and will continue up to two years. The participants will be followed up every four years for at least 12 years. Until March 2018 a total of 4000 people has been enrolled in this study.

## SESSION 755 (SYMPOSIUM)

### THE INSULIN/IGF-1 SIGNALING PATHWAY IN HEALTHY AGING

Chair: D. Lamming, *University of Wisconsin-Madison, Madison, Wisconsin*

Since the discovery of the first genes to regulate aging three decades ago, it has been clear that the insulin/IGF-1 (Insulin-like Growth Factor 1) signaling pathway can regulate lifespan. Since then, studies in organisms including *C. elegans* and mice have found that many dietary, genetic, and pharmaceutical interventions that reduce signaling downstream of insulin/IGF-1 promote longevity and healthspans. However, the molecular and physiological mechanisms which mediate these effects have proven elusive. In this session, we will discuss new findings regarding the sensing of nutrients and the regulation of healthspan and longevity downstream of insulin/IGF-1 signaling, concentrating on the mTOR (mechanistic Target Of Rapamycin) protein kinase and the FOXO (Forkhead box O) family of transcription factors. Topics will include: 1) the molecular mechanisms by which mTOR complex 1 (mTORC1) signaling is regulated by amino acids; 2) how storage of glucose as trehalose can extend longevity via a FOXO-dependent mechanism; 3) the hitherto unappreciated role of mTOR complex 2 (mTORC2) in longevity and healthspan; and 4) the role of FOXO transcription factors in maintaining healthy stem cells.

### MTORC2 IN THE REGULATION OF MAMMALIAN LONGEVITY

D. Lamming, *University of Wisconsin-Madison, Madison, Wisconsin, United States*

Inhibition of the mTOR (mechanistic Target Of Rapamycin) signaling pathway by the FDA-approved drug rapamycin promotes lifespan in many species and delays age-related diseases in mice. While rapamycin was long assumed to be a specific inhibitor of mTOR complex 1 (mTORC1), which is acutely inhibited by rapamycin, we have found that chronic treatment with rapamycin also inhibits a second mTOR complex, mTORC2, in vivo in many tissues. These findings highlight the possibility that the effects of rapamycin on longevity and healthspan may not be mediated solely by inhibition of mTORC1; instead, mTORC2 may also play a role in regulating longevity and health. Here, we show that disruption of mTORC2 signaling specifically in the liver has sexually dimorphic, yet sex hormone independent effects on longevity. We also report on our ongoing studies of the role of mTORC2 in other key metabolic tissues on longevity and healthspan.