

# MANAGING COLLABORATIVE WORKING ON AGEING STUDIES : Indonesia, The UK, Asia Pacific

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## RESEARCH TEAM

Lindawati Kusdhany\*, Hernani Djarir \*  
Vita Priantina Dewi,\* Dinni Agustin\* Barry Hirst \*\*,  
Atik Kridawati\*\*\* , Rodiyah Soekardi \*\*\* and  
Eef Hogervorst \*\*\*\*, and Takeo Ogawa \*\*\*\*\*

**\*Centre for Ageing Studies Universitas Indonesia**

**\*\*Newcastle University, UK**

**\*\*\*University of Respati Indonesia and Yogyakarta**

**\*\*\*\*Loughborough University, UK**

**\*\*\*\*\* Asian Ageing Business Center (AABC), Japan**



# Background



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- Exchange program on education has been conducting between Indonesia and UK institutions, supported by the British Council such as through ODA
- This program has been expanding involving some universities in Indonesia and UK, on ageing issues, such as University of Oxford, Loughborough University and New Castle University.
- Recently this program is being continued and invite other universities to involve, in which Centre for Ageing Studies University of Indonesia is acting as collaborative centre
- The Institutions involve : AABC ( Asian Ageing Business Center) Fukuoka Japan, and would be expanded to Kyushu University, Nagasaki University, ANU and New South Wales, Australia
- The collaboration should be managed well



# Centre for Ageing Studies University of Indonesia (CAS UI)



# Vision of CASUI

To be acknowledged as an interdisciplinary  
and internationally recognized and esteemed  
Centre for Ageing Studies at Universitas  
Indonesia

Using a comprehensive and holistic approach in  
research, education and consultation services with  
significant contributions to health, medical,  
psychological, social services and technology.



# Organization

**Steering Person** : Rector of Universitas Indonesia

**Chair Person/Director** : Professor Tri Budi W Rahardjo

**Vice Chair Persons/Vice Director** : Professor Lindawati Kusdhany

**Core Team**

1. Dra. Siti Dharmayati B. Utoyo Lubis, MA.PhD. (Psychology)
2. Prof.Dr.dr.R. Irawati Ismail, Sp.KJ. (K), M.Epid. (Psychiatry, Epidemiology)
3. Dr. Cz. Heriawan Soejono, Sp.PD. (K) M.Epid. (Geriatrics)
4. Bunda Sri Sugiri, MHum (Social work - Gerontology)
5. Dr. Fatmah (Gerontic Nutrition, Public Health)
6. Mulyadi Widjaja, MA.PhD. (Economic Issues on Ageing)
7. Dr. Junaiti Sahar (Gerontic Nursing)

Supporting Staff : Dra.Dinni Agustin, and Vita Priantinadewi MHS



# Research Topics

- Ageing and dementia
- Ageing and quality of life
- Age Friendly City
- Osteoporosis
- Ageing and oral health
- Ageing and psychological wellbeing
- Ageing and nutrition
- Ageing and frailty
- Ageing and Migration of Care Givers
- Other specific topics in related faculties





# International Collaborations

- WHO SEARO, WHO Indonesia
- HelpAge International
- Active Ageing Asia Pacific
- Asian Aging Business Center, Japan
- Gerontology Society Singapore
- Universities: Hawaii, Kyushu, NUS, Delhi University and universities in the UK
- Would be expanded to: Nagasaki University, ANU and New South Wales Univ



UNIVERSITAS  
INDONESIA

*Veritas, Probitas, Iustitia*  
— EST. 1849 —

# Centre for Ageing Studies University of Indonesia



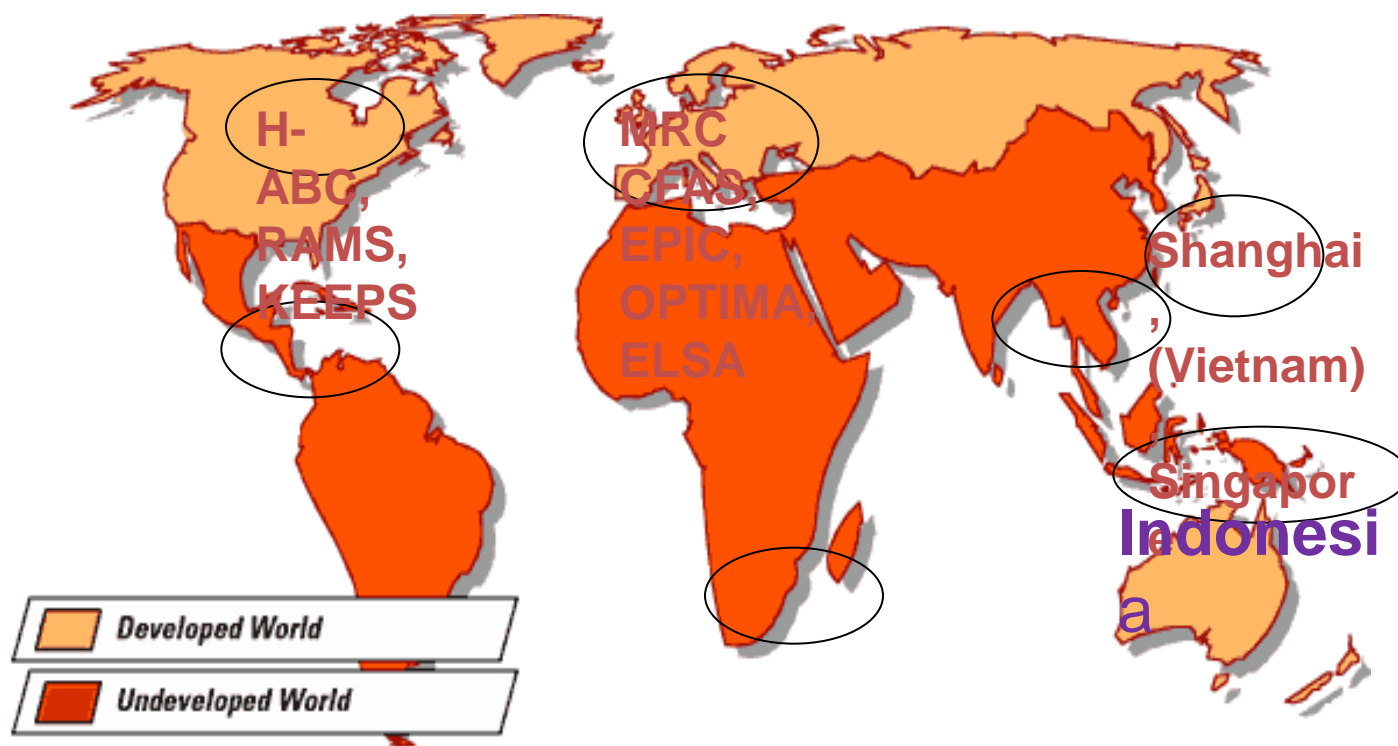
## Activities at Centre for Ageing Studies (CAS) UI





# Previous Collaboration With UK

SSEHS: Human Sciences (Biology, Psychology, Ergonomics/Design) investigates modifiable factors (nutrition/exercise/environment) related to health using a life long approach (from prenatal to old)



With Indonesia: over 75 publications and 9 joint PhD MOU since 2005





# Ageing in Indonesia

## Dementia and Memory Study

Eef Hogervorst and Tri Budi Rahardjo, 2007

- N=719 participants from rural and urban Java (Jakarta, Citengah and Yogyakarta)
- Aged 52 to 99 years of age, 68% women





# **Output related to the MOU between Universitas Indonesia and Loughborough University (2005-2013)**

Under the MOU between Universitas of Indonesia and Loughborough University (LU) between 2005 and 2013, almost 100 international peer reviewed articles directly related to the MOU have been published involving staff and 9 joint PhD students, from LU, UI, University of Diponegoro (UNDIP), IPB, supported by UNRINDO (University of Respati Indonesia) and UNRIYO (University of Respati Yogyakarta)



# On Going Research





**Science and Innovation, Jakarta 2014 Ongoing Project supported by  
The British Council ( seed money)  
Project Title: Can Indonesian food supplements prevent dementia?**

**To investigate memory improvement after a  
Tempe supplement :**

**laboratory , field research and would be  
followed up with clinical trial**

## Universities Involved:

in UI , the additional funding provided by Age Concern Project  
from the government ( DIKTI)

- In progress

1. University of Indonesia (Lab and Filed study)
2. Loughborough University,UK
3. New Castle University, UK
4. Respati University , Indonesia (Laboratory Study)
5. Respati University, Yogyakarta (Observational - Field Study)
6. University of Atmajaya, Jakarta(Field Study)

- In preparation

7. University of Pelita Harapan, Jakarta( Laboratory Study)
8. Bina Nusantara University , Jakarta (Laboratory Study)
9. University of Padjajaran Bandung ( Field Study)

## **Study of Elderly's Memory Decline and Associated Risk Factors. A focus on food consumption and memory : Parameters**

- Socio demographic
- Health Status
- Memory: HVLT and MMSE
- ADL and IADL
- EQ 5D
- Depression ( GDS)
- Food Consumption, particularly relating with tempe and soy products
- Physical activities
- Mental activities



*Laboratory study would explain why tempe had positive associations as it already contains folate and cobalamin due to fermentation. Tofu is soy bean curd and does not contain these B vitamins : Stages*

## Study in In rats:

tempe treatment in  
males and females will  
improve maze test  
performance speed and  
accuracy compared to  
casein placebo

Clinical Trial A drink or  
other product made of  
freeze dried tempe flour  
is easier to consume  
and tastier than cooked  
tempe



# Management

Prof Eef Hogervorst, Loughborough University (LU), UK, Prof. Barry Hirst (New Castle), Universitas Indonesia (UI), and UNRIYO and URINDO manage the project with all WP leaders and to be appointed research assistant (RA) in the UK. Coordination of all packages and reporting for Indonesia is done by the Centre for Ageing Studies (Prof Tri Budi aided by Dr Irsan, Rodiyah, Vita and Dinni)

# Data Collection in Yogyakarta





# Data Collection in Depok





# What we are doing

- Data entry of 250 respondents from Depok/Jakarta and Yogyakarta (Tri Budi, Barkah and Yudarini /UI and Rodyah et al/ UNRIYO)
- Laboratory study in rats (Atik Irsan/ URINDO) conducted at IPB



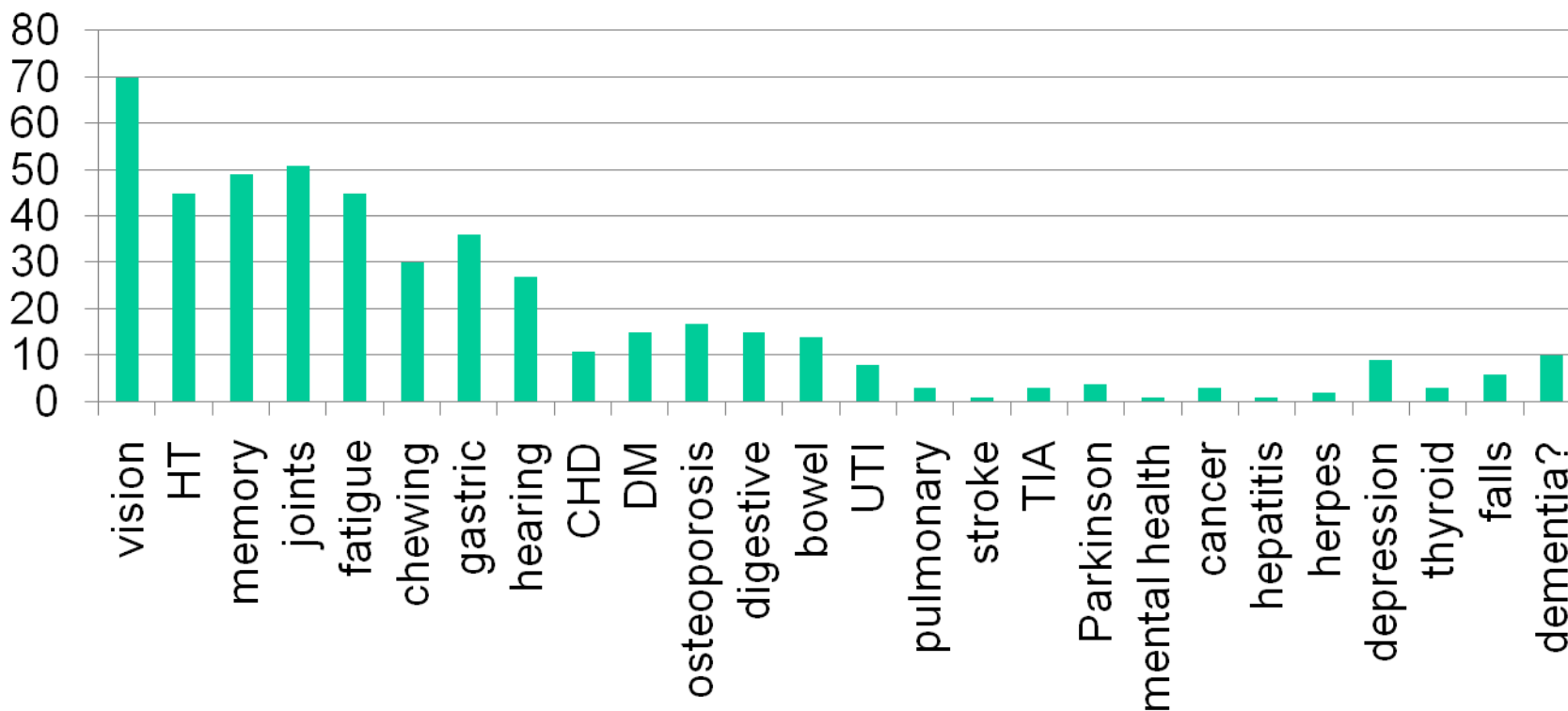


# Temporary Result



# Morbidity in elderly

**morbidity (n=146, ages 60-81 Depok, 82%  
women, 75% high education)**





# Cognitive impairment/dementia

As defined by MMSE<21 and HVLT <15 is correlated with ( in brackets magnitude of problem):

- **Chewing (30%)**
- Hearing (27%)
- Diabetes Mellitus (15%)
- Bowel problems (14%)
- Falls (6%)
- Thyroid (3%)
- Herpes (2%)
- Stroke (1%)



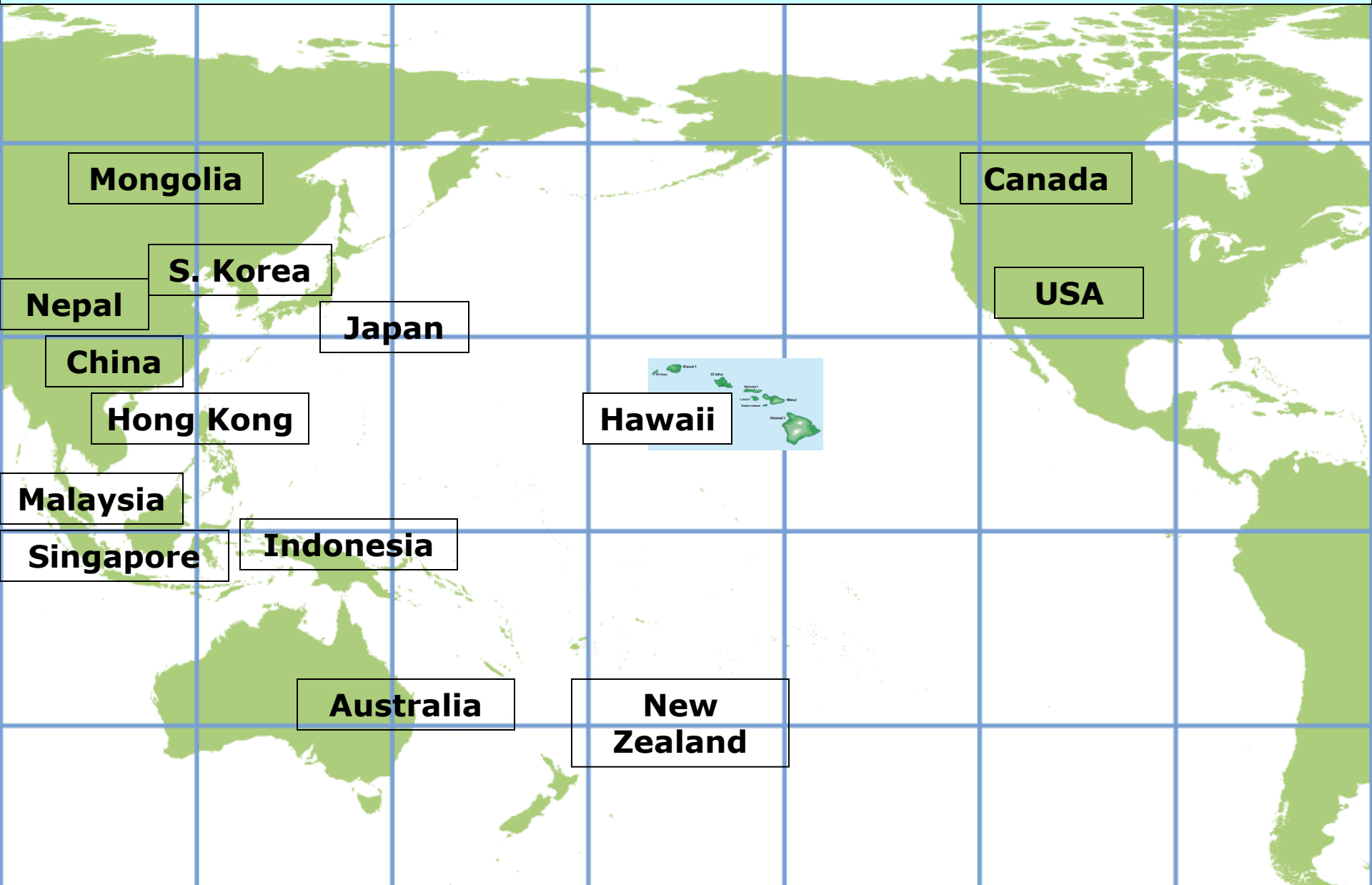
# These are treatable conditions

- Chewing: dentistry. Earlier work (Setyawati, Priandini) found fewer than 10 teeth doubles the risk for dementia
- Bowel issues are associated with a fiber poor diet and lead to vitamin B deficiencies, a risk factor for dementia and heart disease
- Diabetes: insulin and diet. Alzheimer's disease is now known as diabetes type III
- Hearing: infectious disease is common (influenza) needs to be treated to avoid this, need aids

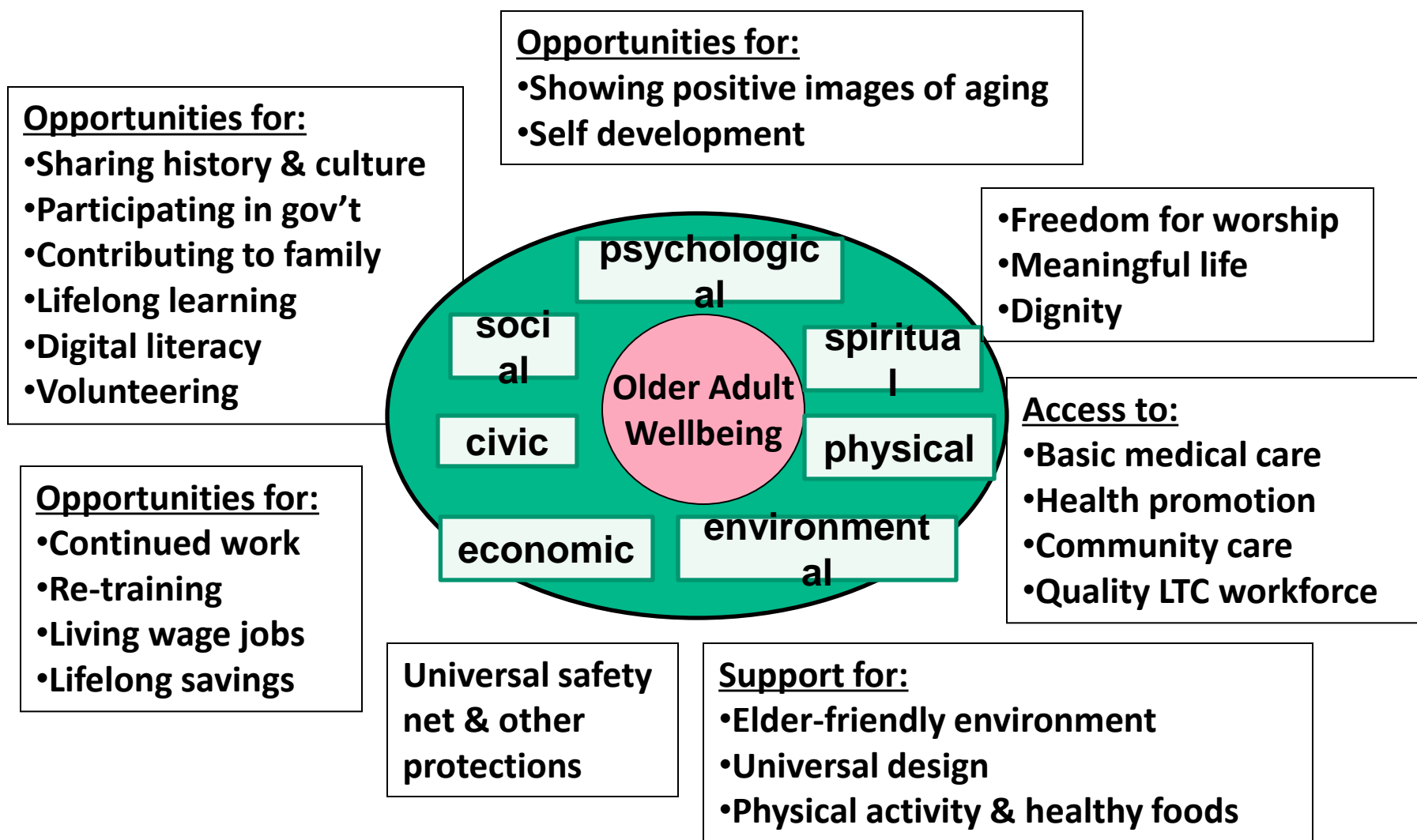


# Cross – Disciplinary Collaboration

# Active Aging Consortium Asia Pacific (ACAP)



# ACAP's Schema for Active Aging as Individual, Family, Community & Social Policy Partnership



## Social Policy Environment

- 2011: Joint Conference with The Southeast Asian Countries Meeting on Active Ageing in Jakarta/Bali
- 2012 The Joint Meeting with the 1<sup>st</sup> World Congress of Healthy Ageing in Kuala Lumpur
- 2012 The Joint Meeting with Hawaii Pacific Gerontological Society
- 2012 The 6<sup>th</sup> Kitakyushu ACAP
- 2013 The Joint Meeting with The 20<sup>th</sup> World Congress of Gerontology and Geriatrics in Seoul
- 2013 The 7<sup>th</sup> Busan ACAP
- 2014 The 8<sup>th</sup> Singapore ACAP







# How to work With Industry?



# Building partnership with industries and other stake holders

The Toyota Foundation: International Grant Program for Fiscal 2013, Toward Solutions Through Mutual Learning: Issues That Emerging Southeast Asia And Japan Share ( capacity building)

Kalbe Farma TBK: Would support Clinical Trial A drink or other product made of freeze dried tempe flour is easier to consume and tastier than cooked tempe ( facilities)

NCOP, BKKBN, Ministry of Health and WHO Indonesia for policy development and implementation based on research findings



# Funding System

# Resource of funding

- British council , seed money
- University funding ( UI, Unriyo, Urindo)
- Dikti Funding ( competition)
- Industry ( facilities, capacity bulding, transpotation)



# CONCLUSIONS

- Population ageing is significant globally
- The impact on health and dementia is crucial
- This condition inspired the collaboration between It has been expanded with other universities in UK, Indonesia and Asia Pacific
- Would be expanded to universities in Australia
- Should managed properly
- Capacity building should be conducted



# Acknowledgements

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- Loughborough University
- New Castle University
- British Council
- University of Indonesia
- Respati University Indonesia and Yogyakarta, and Other Universities in Indonesia
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- The OPTIMA team at the University of Oxford
- NDA and Wellcome Trust
- Toyota Foundation, ACAP, BKKBN, MOH , NCOP, WHO Indonesia



## Thank You

Team of Centre for Ageing Studies, Universitas Indonesia (CASUI) with  
Minister of Health, 2013

