



IAGG Global Research Network on Health & Ageing Questionnaire for selection process

Name of the Centre: **Aging and Technology Reserach Center**
Key Investigator / Head of Department: **Dr. Machiko R. Tomita**
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Description of the Centre:

a) Type of investigations:

- Basic Science / Fundamental
- Clinical Research
- Health Services Research
- Epidemiologic/Public Health Research
- Other

b) Themes investigated (please specify):

- Dementia
- Frailty
- Sarcopenia
- Other Neurodegenerative Disorders
- Geriatric Disorders
- Cardiovascular Risk Factors
- Metabolism
- Ageing research
- Genetics
- Gerontechnology
- Other

c) Number of investigators in ongoing positions:

- Less than 5
- to 10
- More than 10

d) Number of investigators funded by specific projects:

- 1 to 3
- 4 to 5
- More than 5

e) Does your Centre have a:

- Clinical affiliation
- Academic affiliation

f) Does your Centre have a basic sciences program? (Please specify topic)

- Yes **Rehabilitaiton Sicence**
- No

If your Centre is affiliated to a Geriatric Department, please provide the following information:

a) Types of units:

- Acute Ward - **Number of beds: 100**
- Outpatient Ward - **Number of patients/year: 20000**
- Community Care Unit - **Number of visits/year: 0**

- Day Hospital - **Number of places/day: 50**
- Geriatric Rehabilitation Unit - **Number of beds: 60**
- Long-Term Care - **Number of beds: 200**
- Special Units (stroke, memory, ortho-geriatric, psycho-geriatric) - **Number of beds: 81**

b) Number of staff in the Department:

Geriatric: **6**
 Gerontology: **2**
 Other: **15**

c) Does the Day Hospital have specialist services?

- Dementia / Memory
- Cardiovascular clinic
- Rehabilitation
- Falls assessment clinic
- Parkinson's disease clinic
- Other

d) Does your Geriatric Department already cooperate with supervising clinical trials?

- Yes
- No

Management of the Centre:

a) Is your Centre an existing national or government recognized medical research Centre?

- Yes
- No

b) Does the Centre receive funded grants? (Please specify source)

- Yes **NIH, NIDRR, Community Health Foundation, NY state**
- No

c) Does the Centre collaborate with trials funded by pharmaceutical companies?

- Yes
- No

d) Will the Centre shortly begin investigation projects?

- Yes
- No

Indicate the three main publications over the last 2 years:

1/ Name of Journal: **Journal of Multidisciplinary Healthcare, 2:1-9. PMC2875686**

Title of article: **Effects of multidisciplinary Internet-based program on management of heart failure,**

2/ Name of Journal: **Topics in Geriatric Rehabilitation**

Title of article: **Psychological health of primary caregivers of home-based older adults with dementia in India, Taiwan, and the United States**

3/ Name of Journal: **Smart Home Systems (book),**

<http://www.sciyo.com/articles/show/title/smart-home-with-healthcare-technologies-for-community-dwelling-older-adults>

Title of article: **Smart home with healthcare technologies for community-dwelling older adults**

Please add short biographies (maximum 1 page) of the Key Investigators and Head of Department

Ageing and Technology Research (ATR) is a recognized research center at the University at Buffalo (http://www.buffalo.edu/aboutub/research_centers.html#housed) and is housed in the School of Public Health and Health Professions. This is currently the only research center that is devoted to research on Ageing and Technology in the United States. The director, Dr. Tomita, is serving as a technical adviser for

preparation for the Congress hearing on the direction of the US society in terms of aging and technology by the Department of Health and Human Services. This center is currently in process of becoming a part of forthcoming Aging and Geriatric Research Center at the University at Buffalo. Therefore, if this happens, Aging and Geriatric Research Center will be the center that would be a member of this network. However, it may take a few years for this actualization. University at Buffalo does not have a medical center but is affiliated with Buffalo General Hospital, Millard-Fillmore Gates Circle, Millard-Fillmore Suburban Hospital, Erie County Medical Center, Roswell Cancer Research Institute, and Veterans Administration Medical Center of Western New York, all of which have geriatric components. We don't have a firm grip of the number of beds but altogether each item above should be large. The ATR is multidisciplinary (rehab scientists, behavioral medicine specialists, MDs, nurses, engineers, pharmacists, and exercise physiologists). The ATR takes a unique approach in aging and health, especially engaging in preparation for the future (super) aging society. In this sense technology indicates health high-tech devices used for interventions for chronic illnesses management, aiming at increasing quality of health of patients and reduction of health care utilization and costs. Also ATR recognizes that technology can be used for a home environmental improvement so that older adults have more mobility and lower extremity strength that lead to prevention of falls. And finally, technology can be low-tech such as assistive devices. ATR promotes education of assistive devices for older adults and their informal caregivers through free educational online courses and provide Continuing Education Units for health care professionals. Although these research activities have been funded at the national level, one of our most recent endeavor for fall prevention in older adults is a part of local concerned efforts as well as an international interest (Japan) due to shared problems. In addition to Japan, we have collaborated with health organizations in Taiwan and India. We believe that despite different history and culture in different countries, people face similar problems and emotions. Although uniqueness should exist for the solution, learning and sharing the problems and unique solutions may bring forth an efficient common approach for aging and aged societies.