Dementia and Brain Aging in Low- and Middle-Income Countries

Dec. 6-9, 2022 Nairobi, Kenya All times are in East Africa Time

Tuesday, Dec. 6

4 – 5:45 p.m. **Opening and Welcome**

Welcome address by convenors Rajesh Kalaria (Newcastle University) and Gladys Maestre (University of Texas Rio Grande Valley), followed by opening remarks by Julius Ogeng'o (University of Nairobi), Patrick Amoth (Kenya MoH), Adesola Ogunniyi (AfDC), Lea Grinberg (GBHI), Damali Martin (NIH), David Ndetei (AMHRTF).

Keynote

Martin Orrell, University of Nottingham, UK *The Power of Music and Dementia.*

Papillion Musa

A concert by East African musician Papillion.

5:45 – 8 p.m. Welcome Reception

Wednesday, Dec. 7

8 – 9 a.m. Skills Breakfast: Funding

One on one time with funders and awardees over breakfast.

Mentors: Damali Martin, Stefania Forner, Victor Valcour, Valentine Ucheagwu,

Lingani Mbakile-Mahlanza

9 – 10:30 a.m. **Dementia and Brain Aging in LMICs: Global Views**

An overview of aging and dementia in LMIC across the globe, including cultural considerations, strengths in knowledge, emerging challenges and

opportunities for collaboration.

Chairs: Maria Carrillo and Raul Arizaga

Presenters:

Adesola Ogunniyi, University College Hospital Ibadan, Nigeria

Aging and Dementia in LMIC: Africa.

Agustin Ibanez, Universidad San Andrés, Argentina

Aging and Dementia in LMIC: Latin America.

Gabriela Novotni, University Clinic of Neurology, North Macedonia *Aging and Dementia in LMIC: Europe.*

Suvarna Alladi, National Institute of Mental Health and Neurosciences, India Aging and Dementia in LMIC: Asia.

Linus Jonsson, Karolinska Institutet, Sweden The Heath Economics of Aging and Dementia in LMIC.

10:30 – 11 a.m.

Coffee Break and Posters

Poster presentations of submitted abstracts.

11 a.m. – 12:30 p.m.

Vascular Dementia and Strokes

Chairs: Rufus Akinyemi and Ingmar Skoog

Presenters:

Ingmar Skoog, Center of Health and Aging (AgeCap), Institute of Neuroscience and Physiology, Sahlgrenska Academy at the University of Gothenburg, Sweden

Preclinical vascular dementia. The H70-studies within NEAR.

Yared Zedwe, Addis Ababa University, Ethiopia
Magnitude and Predictors of Post-Stroke Cognitive Impairment among
Ethiopian Stroke Survivors: A Cross Sectional Study.

Thomas Issac, National Institute of Mental Health and Neurosciences, India Apolipoprotein E4 Allele as a Predictor in the Course and Outcome in Patients with Vascular Cognitive Decline Due to Cerebral Small Vessel Disease.

Claudia Satizabal, University of Texas, USA
Biomarkers for Vascular Contributions to Cognitive Impairment and
Dementia.

Claudia Suemoto, University of Sao Paulo, Brazil Vascular Dementia: A Common Cause of Dementia in Low and Middle-Income Countries.

Rufus Akinyemi, University of Ibadan, Nigeria Updates on Stroke and Vascular Cognitive Impairment in Africa.

12:30 – 12:45 p.m.

Resources: Global Networks

Short presentations about global networks in dementia science and opportunities to join and participate. Hosted by Percy Griffin

Panelists: Victor Valcour, Kirti Ranchod, Wambui Karanja, Desire Tshala-Katumbay, Rufus Akinyemi, Diego Sepulveda-Falla, Agustin Ibanez 12:45 – 2 p.m.

Networking Lunch

Discussions about collaborative networks in dementia science with relevant representatives over lunch.

2 - 3:30 p.m.

Movement Disorders and Dementia

Chairs: Richard Walker and Njideka Okubadejo

Presenters:

Zvezdan Pirtosek, Ljubljana University Medical Centre, Slovenia Why Movement and Thought Are So Often Affected Together?

Njideka Okubadejo, University of Lagos, Nigeria.

Cognitive Function in Parkinson Disease in Africa: What We Know and What We Need to Know.

Rohan de Silva, University College London, UK Lessons From Genetics of Movement Disorders.

Kamadore Toure, Senegal

Movement Disorders, Cognitive Function and Frailty in Senegal, West Africa.

Tope Farombi, University College Hospital, Nigeria Feasibility, Challenges, and opportunities for deploying Telemedicine in ADRD in LMICs: an African Viewpoint.

David Brodie-Mends, Korle-Bu Teaching Hospital, Ghana

Parkinson's disease: assessing non-motor symptoms and their associations with quality of life among patients in Korle-Bu teaching hospital, Ghana.

Richard Walker, Newcastle University, UK

NIHR Global Health Research Group on Transforming Parkinson's Care in Africa (TraPCAf).

3:30 - 4 p.m.

Coffee Break and Posters

Poster presentations of submitted abstracts.

4 - 5:30 p.m.

Language and Aphasia

Chairs: Thomas Bak and Michael Hornberger

Presenters:

Thomas Bak, University of Edinburgh, UK

The Implications of Linguistic Diversity for Aphasia Assessment & Treatment.

Monica Rosselli, Florida Atlantic University, USA

The Relevance of Culture, Acculturation, and Bilingualism in the Clinical Diagnosis of Mild Cognitive Impairment and Dementia among Latinos/Hispanics in the USA.

Faheem Arshad, National Institute of Mental Health and Neurosciences, India Developing a Language Specific Tool for Primary Progressive Aphasia: Challenges in a Diverse Sociocultural and Multilingual Indian Context.

Eliza (Eleni-Zacharoula) Georgiou, University of Patras, Greece Utility of WOrd FInding Disorders Test (WOFI) in dysnomia detection in early Alzheimer's Disease in a Naturalistic Clinical Setting.

Michael Hornberger, University of East Anglia, UK Spatial Disorientation – A Non-verbal Approach towards Cognitive Assessment in Preclinical and Clinical Dementia.

Bruce Miller, University of California San Francisco, USA Spectrum of Frontotemporal Dementias.

5:30 – 6 p.m. **Keynote**

Facundo Manes, Chamber of Deputies of Argentina Neuroscience, Dementia in LMICs and Public Policy.

6 – 8 p.m. **Networking Reception hosted by GBHI**

Thursday, Dec. 8

8 – 9 a.m. **Skills Breakfast: Journals**

One-on-one time with global editors from leading dementia journals, over breakfast.

Mentors: Suvarna Alladi, Agustín Ibáñez, Sudha Seshadri, Rema Raman, Ishtar Govia, Martin Orrell, Raj Kalaria

9 – 10:30 a.m. **Genetic Factors**

Chairs: Peggy Pericak-Vance and Francisco Lopera

Presenters:

Francisco Lopera, University of Antioquia, Colombia *Autosomal Dominant Alzheimer Disease in Colombia*.

Olusegun Baiyewu, University of Ibadan, Nigeria Risk Effect of APOE Gene in Persons Living with Alzheimer Disease in Ibadan.

Peter St George-Hyslop, University of Toronto, Canada TREM2 Signalling in Microglia as a Genetically Defined Therapeutic Target.

Jeffrey Vance, University of Miami, USA Functional Studies Towards Identifying the Protective Loci in the African Local Ancestry.

Joseph H Lee, Columbia University Medical Center

A Multiomic Examination of Alzheimer's Disease in Special High and Low Risk Cohorts.

David Babalola, University of Ibadan, Nigeria

Knowledge and Attitudes towards Dementia and Dementia Genetics among Geriatric Clinic Attendees at University College Hospital, Ibadan, Nigeria.

10:30 – 11 a.m. Coffee Break and Posters

Poster presentations of submitted abstracts.

11 a.m. – 12:30 p.m. **Modifiable Risk Factors I: Observational Studies**

Chairs: Mathew Varghese and Gill Livingston

Presenters:

Gill Livingston, University College London, UK Lifetime Modifiable Risks for Dementia in Different Cultures.

Prekshya Thapa, B.P. Koirala Institute of Health Sciences, Nepal Prevalence of Common Mental Disorders (Depression and Anxiety), Dementia and Disability Among Community Residing People Aged ≥60 in Nepal.

Noeline Nakasujja, Queen Mary University, UK Alzheimer's Disease in the Ugandan Community: Detection and Validity of Diagnosis.

Albertino Damascneo, Eduardo Mondlane University, Mozambique *High Blood Pressure and Late Dementia.*

Celestin Kaputu, University of Kinshasa, Democratic Republic of Congo Assessing Cognition Function in Diabetics in Bukavu, DRC.

Robert Friedland, University of Louisville, USA

The Interactions of Diet and the Microbiome and the Modifiable Risk Factors for Alzheimer's Disease.

12:30 – 12:45 p.m. **Resources: ISTAART**

Short presentations about opportunities with the International Society to Advance Alzheimer's Research and Treatment. Hosted by ISTAART.

Panel: Agustin Ibanez, Rema Raman, Ratnavalli Ellajosyula, Suvarna Alladi, Lea Grinberg, Chinedu Udeh-Momoh

12:45 – 2 p.m. **Networking Lunch**

Discussions about opportunities in ISTAART with relevant representatives over lunch.

2 – 3:30 p.m. Modifiable Risk Factors II: Interventional Studies

Chairs: Daisy Acosta and Maelene Guerchet

Presenters:

Eef Hogervorst, Loughborough University, UK *Dementia prevalence in different areas in Indonesia.*

Solomon Nyame, Kintampo Health Research Center, Ghana

Iracema Leroi, Dublin, Ireland Eyes, ears and mind: Sensory-Cognitive Health in Older People.

Sudha Seshadri, The University of Texas Health Science Center at San Antonio, USA

Modifiable Risk Factors for Dementia: Role of Diet, Sleep, Physical Activity and Social Networks.

Masafumi Ihara, National Cerebral and Cardiovascular Center, Japan A role of Streptococcus mutans in intracerebral hemorrhage --a potential target of preventive interventions.

Antoine Gbessemehlan, University of Bordeaux, France Association between depression, anxiety, and dementia among older people in Central Africa.

Chinedu Udeh-Momoh,Imperial College London, UK A Multi-National Collaboration to Assess the Feasibility and Sustainability of Implementing Multimodal Brain Health Promotion Strategies in Sub-Saharan Africa (The WWFINGERS-AFRICA Project).

3:30 – 4 p.m. Coffee Break and Posters

Poster presentations of submitted abstracts.

4 – 5:30 p.m. HIV and Dementia

Chairs: Stella-Maria Paddick and Victor Valcour

Presenters:

Stella-Maria Paddick, Newcastle University, UK Current Challenges in Identification of HIV-associated Neurocognitive Disorders (HAND), An Overview.

Anna Dreyer, University of Cape Town, South Africa Cognitive performance in people with HIV living in a peri-urban community in Cape Town South Africa: Determining impairment and the role of psychosocial factors.

Sam Nightingale, University of Cape Town, South Africa A New Approach to Cognitive Impairment in People Living with HIV.

Mamuka Djibuti, Georgia

Research Gaps in HIV and Non-Communicable Diseases (NCD) related to Vascular Cognitive Impairments and Dementias (VCID) in Eastern Europe and Central Asia.

Jaime Vera, Brighton and Sussex Medical School, UK Assessing health related quality of life in people living with HIB and cognitive impairment.

Primrose Nyamayaro, University of Zimbabwe Acceptability and Feasibility of Routine Screening for Neurocognitive Impairment in Adults Living with HIV.

8 p.m.

Symposium Safari Banquet

Nyama Choma Ranch

Friday, Dec. 9

8 - 9 a.m.

Skills Breakfast: HIC-LMIC Collaborations

One on one time with global leaders in dementia research to discuss best practices for collaboration, over breakfast.

Mentors: Rufus Akinyemi, Lea Grinberg, Iracema Leroi, Maelenn Guerchet, Peggy Pericak-Vance, Mathew Varghese, Suvarna Alladi, Wambui Karanja, Valentine Ucheagwu, Adesola Ogunniyi, Jeffrey Vance

9 – 10:30 a.m.

Cognitive Testing and Diagnosis

Chairs: Mary Sano and Ricardo Allegri

Presenters:

Ratnavalli Ellajosyula, Manipal Hospital, India Delays and Underdiagnoses of Dementia in the LMICs: An Indian Perspective.

Seid Gugssa, Addis Ababa University, Ethiopia

Cross-cultural adaptation of AD-8 into Amharic for operationalizing the detection of cognitive impairment in a primary care setting of Ethiopia.

Tarek Bellaj, Qatar University, Qatar Suitability of Neuropsychological Tests for the Assessment of Dementia in Africa: A Systematic Review. Maira Okada de Oliveira, Brazil Development of the Brazilian Mini-Addenbrooke's Cognitive Examination (MINI-ACE BR).

Lingani Mbakile Mahlanza, Botswana

Ricardo Allegri, Neurological Research Institute Fleni, Argentina How We should Work to Join Forces in an Attempt to Promote the Scientific Research in LMIC: Experience from Latin America.

Mary Sano, Mount Sinai, USA Cross cultural lessons learned.

10:30 – 11 a.m. Coffee Break and Posters

Poster presentations of submitted abstracts.

11 a.m. – 12:30 p.m. Biomarkers & Biobanking

Chairs: Henrik Zetterberg and Lea Grinberg

Presenters:

Ranil de Silva, General Sir John Kotelawala Defense University, Sri Lanka Neuro-BioBank Sri Lanka Creating Opportunities: Cognitive, Molecular Biomarker Discovery and Natural Product Therapeutics.

Lea Grinberg, University of California San Francisco, USA *Biomarkers and Biobanking.*

Diego Sepulveda-Falla, University of Hamburg, Germany Deep Phenotypic Characterization of Familial Alzheimer's Disease PSEN1 E280A Brains.

Marufjon Salokhiddinov, Tashkent Medical Academy, Uzbekistan Automated MRI-based analysis of medial temporal lobe volume is a key biomarker at early stage of Alzheimer's disease.

Henrik Zetterberg, University of Gothenburg, Sweden Blood Biomarkers: Democratizing Neurodegenerative Disease Diagnostics.

Mie Rizig, University College London, UK Racial Disparities in Dementia Biomarkers' Research Focussing on Differences between Black African and Caucasians.

12:30 – 12:45 p.m. Resources: Establishing Clinical Trial Programs

Short presentations about recruiting individuals into dementia trials and best practices. Hosted by Rema Raman

Panel: Ratnavalli Ellajosyul, Mary Sano, Henrik Zetterberg, Francisco Lopera

12:45 – 2 p.m. **Networking Lunch**

Discussions about recruiting individuals into dementia trials with relevant

representatives over lunch.

2 – 3:30 p.m. **Dementia Care and Policy**

Chairs: Victoria Mutiso and Wendy Weidner

Panelist: Martin Orrell

Presenters:

Joy Onoria, Uganda ADRD in a Ugandan Context.

Felix Potocnik, South Africa Overview, Policy, Care and Future Directives of South African Dementia Patients.

Noe Garza, University of Texas Rio Grande Valley, USA Critical reflection in practice: Generating Knowledge from the Interactions with Promotores for Engagement in Neurocognitive Disorders.

Christine Musyimi, Africa Mental Health Research and Training Foundation, Kenya

Integrating a community-level dementia screening programme in Kenya.

Ishtar Govia, Epidemiology Research Unit, Caribbean Institute for Health Research (CAIHR), The University of the West Indies. *Policy Relevant Experiences from Jamaica*.

3:30 p.m. Close and Farewell

POSTERS

Vascular Dementia and Strokes

P-01 Bernard Fongang, Glenn Biggs Institute for Alzheimer's & Neurodegenerative Diseases, University of Texas Health Sciences Center, USA Changes in the gut microbiome composition may parallel Alzheimer's disease progression

Movement Disorders and Dementia

P-02 Albert Stezin, Centre for Brain Research; National Institute of Mental Health and Neurosciences, India

Contributory factors for mild cognitive impairment and dementia in spinocerebellar ataxia 2

P-03 Opeyemi Ogunsuyi, The Federal University of Technology Akure, Nigeria Comparative Effect of Caloric and Non-Caloric Sweeteners on Neuroinflammatory Indices in Brain Cortex and Hippocampus of Scopolamine-Induced Rat Model of Amnesia

P-04 Ranil De Silva, General Sir Kotelawala Defence University (KDU), Sri Lanka Dietary Neuroprotection on the Degree of Proteinopathies in Sri Lankan Aging Autopsy Brains: A study protocol

Language and Aphasia

P-05 Esti Blanco-Elorrieta, Harvard University, USA

Mapping cortical lesions and communicative deficits in bilingual aphasia

Modifiable Risk Factors: Observational Studies

P-06 Vincent Olughor, Faculty of Pharmacy, Department of Pharmaceutics and Industrial Pharmacy, University of Ibadan, Nigeria

Awareness creation on the molecular and cellular events common to Ageing and Neurodegenerative diseases such as Alzheimer's disease (AD) and the distinctions between both: Implications for AD Therapeutic Formulations Interventions

P-07 Jackline Karungi, College of Health Sciences, Makerere University, Uganda

SOCIAL NETWORKS FOR OLDER ADULTS WITH AND WITHOUT ALZHEIMER'S DISEASE IN CENTRAL UGANDA

P-08 Jonathan Zegarra-Valdivia, Achucarro Basque Center for Neuroscience; Global Brain Health Institute (GBHI), University of California San Francisco; Universidad Señor de Sipán, Spain; USA; Peru

Lifestyle and Sociodemographic Features impacts the cognitive performance of Peruvian Adults

P-09 Nkouonlack Cyrille, Faculty of Health Sciences, University of Buea; Brain Research Africa Initiative, Cameroon

Prevalence and Determinants of Dementia among the elderly in the Buea Health District: A Community-Based Study.

- **P-10 Funmi Akindejoye**, Global Brain Health Institute, TCD, Ireland A COMPARATIVE REVIEW ON THE INFLUENCE OF URBAN DESIGN ON MENTAL HEALTH IN A DEVELOPED AND DEVELOPING NATION
- **P-11 Wambui Karanja**, Global Brain Health Institute, Trinity College Dublin, Ireland African Brain Health Interactive Dashboard: Improving access to epidemiological data on established and emerging dementia risk factors and determinants of brain health for countries in Africa
- P-12 [WITHDRAWN]

Modifiable Risk Factors: Interventional Studies

P-13 Lina Velilla, Global Brain Health Institute; Grupo de Neurociencias, Universidad de Antioquia, USA; Colombia

Latin American strategy for dementia prevention through lifestyle modification. Colombian experience in a multicenter study with 12 Latin American countries.

HIV and Dementia

- **P-14 Upal Roy**, The University of Texas Rio Grande Valley, USA The interaction of Type 1 Interferon and STAT1 in HIV-associated neurocognitive disorder (HAND) and Alzheimer's Disease pathology
- **P-15 Deborah Gustafson**, State University of New York Downstate Health Sciences University, USA

Vascular Contributions to Cognitive Impairments and Dementias in People Living with HIV in the Country of Georgia.

Cognitive Testing

P-16 Toure Kamadore, Université de Thiès, Senegal

The Test of Keur Madiabel is a valid and reliable tool to assess ADL for the screening of dementia

- **P-17 Maira Okada de Oliveira**, University of São Paulo; Atlantic Senior Fellow for Equity in Brain Health at GBHI; Santa Marcelina Hospital, Brazil; DEVELOPMENT OF THE BRAZILIAN MINI-ADDENBROOKE'S COGNITIVE EXAMINATION (MINI-ACE BR)
- **P-18 Rademene Oria**, Cross River University of Technology, CRUTECH, Nigeria *Modulatory role of curcumin on cobalt-induced cognitive deficit, oxidative damage and astrocytosis: involvement of Nrf2 signaling.*
- **P-19 Raphaella Lewis**, University of Cape Town, South Africa Screening for proteinopathic-related dementias in low-resource clinical contexts: A machine learning approach
- **P-20 Aminette D'Souza**, Cardiff University, United Kingdom Developing a tablet-based cognitive tool for dementia assessment across cultures: A pilot study with healthy adults in the UK and India
- **P-21 Valentine Ucheagwu**, Global Brain Health Institute Trinity College, Ireland *Prevalence and Patterns of Cognitive Impairments in a Sample of Older Adult Community Dwellers from Nigeria*
- **P-22 Samuel A Onasanwo**, University of Ibadan, Nigeria

 ANTI-AMNESIC POTENTIALS OF ETHANOL EXTRACT OF Adenopus breviflorus FRUIT IN

 SCOPOLAMINE-INDUCED MEMORY IMPAIRMENT IN WISTAR RATS.
- **P-23 Kevin Thomas**, University of Cape Town, South Africa
 Associations between Technological Experience and Tablet-Based Neurocognitive Test
 Performance: Data from cognitively impaired South African older adults
- **P-24 CHUKWUANUGO OGBUAGU**, Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nigeria

Primary Health Care providers knowledge of Cognitive Assessment and Tools for geriatric population in Southeast Nigeria: a pilot survey.

Biomarkers

P-25 Akintunde Orunmuyi, Kenyatta University Teaching, Research and Referral Hospital, Kenya *Imaging Dementia in African Populations: Closing the Gap on Challenges - A perspective*

Dementia Care and Policy

P-26 MUSA ILIYASU, Kogi State University, Nigeria

The Therapeutic Potential of Neural Stem Cells on D-galactose- and Lead-Induced Alzheimer-like Disease in a Rat Model

P-27 Anna Tjin, RCSI SIM Centre for Simulation Education and Research, RCSI University of Medicine and Health Sciences, Ireland

Role alteration, coping strategies, and resource accessibility of south asian care partners of individuals with brain health conditions during the COVID-19 pandemic.

P-28 Olufisayo Elugbadebo, College of Medicine, University of Ibadan; University College Hospital Nigeria

Predictors and reasons for discontinuity of care among people diagnosed with dementia in a memory clinic in South West Nigeria

- **P-29 Núbia de Freitas**, Universidade Federal do Rio Grande do Sul, Brazil Social determinants as risk factors for dementia using ELSI-Brazil cohort data
- **P-30 Dorkhy Geeta**, Association Alzheimer's, Mauritius, Mauritius *A triangulated study on the non-pharmacological management of Alzheimer's disease in Mauritius.*
- **P-31 José Cavazos**, Neurology and Physiology UT Health San Antonio, USA The value of trainee career development as the focus of collaborations between neurology centers from high and low resource countries

Other

P-32 Stephen Wandera, Makerere University, Uganda

Cognitive Stimulation Therapy for older people with Dementia in Africa: A Scoping Review

- **P-33** Edem Edem, University of Lagos; Afe Babalola University, Nigeria Immunomodulatory Role of African Mistletoe Lectins on Microglial Activity following Lipopolysaccharide Exposure
- **P-34 Thamara Tapia-Muñoz**, Millennium Institute for Caregiving Research; University College London, Chile; United Kingdom

Factors associated with changes in emotional and social loneliness among Latin American family care partners of people with dementia and other long-term conditions during Covid-19

P-35 Ademola Oremosu, University of Lagos, Nigeria

Tapinanthus cordifolius abrogates gastrointestinal dysregularion via the modulation of enteric inflammation and neurtrophin signaling in a mouse model of Alzheimer's disease

- **P-36** Iracema Leroi, Global Brain Health Institute; Trinity College Dublin, Ireland Dementia Training Academy for Clinicians in South Asia: Outcomes and Impacts
- P-37 Victor Nwinee, AXA OneHealth, Nigeria

 LATE ONSET VITILIGO AND MENTAL HEALTH AMONG THE ELDERLY IN NIGERIA.
- **P-38** Luciano Mariano, Programa de Pós-Graduação em Neurociências, Universidade Federal de Minas Gerais; Universidade Federal de Minas Gerais, Brazil Neuroanatomical Substrates of Apathy in Dementia
- **P-39 Mario Gil,** The University of Texas Rio Grande Valley; The University of Texas Rio Grande Valley School of Medicine; RGV Alzheimers Center (AD-RCMAR), USA Investigation of the interaction among psychosocial and behavioral factors, cognition, aging, and Alzheimer's Disease and related Dementias from a translational research perspective
- **P-40 Esmeralda Matute**, Instituto de Neurociencias, CUCBA, Universidad de Guadalajara, México

Demographic characteristics in families with APP V717I and PSEN1 A431E variants in Jalisco, México