



ALZHEIMER'S GLOBAL SUMMIT LISBON 2017

GLOBAL SUMMIT

PROGRAM SOCIAL HEALTH

18 – 19 sept. de 2017 | Lisboa
Champalimaud Foundation





TABLE OF CONTENTS

Introduction	4
Program	
Day 18	4
Day 19	6
Speakers	
Maria do Rosário Zincke Dos Reis	9
Pablo Martínez-Lage	11
Karin Palmlöf	13
G.Allen Power	14
Manuel Caldas de Almeida	15
Wilhelmina Hoffman	17
Mercé Boada	19
Habib Chaudhury	21
Mayte Sancho	23
José María García-Alberca	25
Debbie Tolson	27
Charles Scerri	30
Álvaro Carvalho	31
Jesús María Rodrigo	33
Takanori Shibata	35
Elisa Pérez Redondo	37
Aimee Spector	39
Albino J. Oliveira-Maia	41
Vladimir Hachinski	43



INTRODUCTION

The **Alzheimer's Global Summit** will take place on **September 18-22, 2017** in **Lisbon**, Portugal at the **Champalimaud Foundation** with the support of the **Queen Sofia Foundation**. This key meeting on Alzheimer's Disease will be built on two main pillars: the Social and Health Care Research (September 18-19), organized by the **National Reference Centre for Alzheimer's and Dementia Care's (CREA) of Imerso** and the Scientific Summit (September 20-22) organized by the **Center of Research in Neurological Diseases (CIEN) Foundation** and the **Center for Networked Biomedical Research in Neurodegenerative Diseases (CIBERNED)**. Each thematic area is aimed to a different audience and has its own program to give us a more complete overview of Alzheimer's Disease in order to advance in the understanding of this neurodegenerative disease:

The Social and Health Care Research.

Innovative experiences related to the use of non-pharmacological therapies and people-centered care will be shown in order to promote socio-health research and normalize the daily lives of people with dementia and their families.

This forum, which will host the most relevant experts and researchers at an international level, seeks from a scientific approach to respond to both professionals and caregivers on how to improve the quality of life of people living with Alzheimer's disease.




As in previous years, the CRE of Alzheimer's together with the Reina Sofia Foundation, through these meetings, aims to bring society closer to the advances of research in the fight against Alzheimer's disease and, above all, to raise the evident need to advance in the search for global solutions and responses.

We look forward to welcoming you in Lisbon, Portugal.



PROGRAM

DAY 18

08:00 – 09:00	REGISTRATION OF ASSISTANTS
<p>09:00 – 09:15</p> 	<p>Welcome</p> <p>Organizers:</p> <p>Champalimaud Foundation. Queen Sofia Foundation. National Reference Centre for Alzheimer's and Dementia Cares's of Imsero.</p>
<p>09:15 – 10:30</p> 	<p>Lecture</p> <p>Introduction: António Leuschner, Portugal – National Mental Health Council.</p> <p>Maria Do Rosário Zincke Dos Reis, Portugal – 'Current situation of Alzheimer's disease in Portugal'.</p> <p>Pablo Martínez - Lage, Spain – 'A current look at dementias in Spain'.</p>
<p>10:30 – 12:00</p> 	<p>Session I - Environmental Conditions and Quality of Life</p> <p>Moderator: Constança Paúl, Portugal - Institute of Biomedical Sciences Abel Salazar (U. Porto).</p> <p>Karin Palmlöf, Sweden – 'Gardens for outdoor therapies to promote independence in early stages of dementia'.</p> <p>G. Allen Power, United States – 'The Eden Alternative® Framework for Well-Being and an Innovative Approach to Dementia'.</p> <p>Manuel Caldas de Almeida, Portugal – 'Project Lives of the Union of the Mercies'.</p> <p>Wilhelmina Hoffman, Sweden – 'SilviaBo - Cognitive adapted housing'.</p>
12:00 – 12:30	PAUSA & COFFEE BREAK



12:30 – 13:15

Master Lecture



Presentation: **María Isabel González Ingelmo**, Spain – Director of CRE of Alzheimer. Imsero
Mercé Boada, Spain – ‘The Art of (NO) Lose’.

13:15 – 14:30

LUNCH

14:30 – 15:15

Session / Lecture



Presentation: **Alexandre de Mendonça**, Portugal – Faculty of Medicine, University of Lisbon.
Habib Chaudhury, Canada – ‘Design Matters: Developing Responsive Physical environment for People with Dementia in Long-Term Care Facilities’.

15:15 – 16:30

Session II - Person-Centered Intervention Models



Moderator: **Manuel Gonçalves Pereira**, Portugal – Faculty of Medical Sciences, New University of Lisbon.
Mayte Sancho, Spain – ‘Model of care centered on the person. Experience Matia Foundation’.
José María García Alberca, Spain – ‘Behavioral disorders in people with dementia’.
Debbie Tolson, United Kingdom – ‘Improving Advanced Dementia Care: Lessons from the European Palliare Project’.

16:30 – 16:40

BREAK

16:40 – 18:00

Session / Lecture



Moderator: **Catarina Alvarez**, Portugal – Alzheimer Portugal.
Mercé Boada, Spain – ‘Ethical Framework for Predictive Diagnosis of Alzheimer’s Disease Quality of Life of Subjects at Risk and their Close Other’.

POSTER COMMUNICATIONS

18:00 – 18:30

Session / Lecture



‘The Carer Perspective’



DAY 19

09:00 – 10:15

Session III - National Plans



Moderator: Jose Carreira, Portugal - President Alzheimer Portugal.

Charles Scerri, Dementia Society Malt (Europe's Commitment to Alzheimer's) – 'The Situation of the Alzheimer's National Plans in Europe'.

Álvaro Carvalho, Portugal - Director National Program for Mental Health of the Directorate-General for Health –'Portugal: Structuring the national intervention plan on dementias'.

Jesús María Rodrigo, Spain- Executive Director CEAFA – 'Advances in Spain. The State Dementia Group and the role of the social fabric'.

10:15 – 10:30

PAUSA & COFFEE BREAK

10:30 – 11:15

Session III - National Plans



Presentation: María Isabel González Ingelmo, Spain - Director of CRE of Alzheimer. Imsero.

Takanori Shibata, Japan – 'Neurological Therapeutic Medical Robot, PARO, for Non-pharmacological

11:15 – 12:30

Session IV - Non-Pharmacological Therapies



Moderator: Isabel Santana, Portugal - Faculty of Medicine, University of Coimbra.

Elisa Pérez Redondo, Spain – 'Dog-Assisted intervention in Persons with Dementia. Experience in the CRE of Alzheimer'.

Aimee Spector, United Kingdom – 'Cognitive Stimulation Therapy (CST) for mild to moderate dementia'.

Albino J. Oliveira-Maia, Portugal – 'Combined rTMS



12:30 – 12:40

Conclusions



Presentation: Carmen Balfagón Lloreda, Spain -
Imsero General Manager.

12:40 – 13:00

Lecture



Presentation: Carmen Balfagón Lloreda, Spain -
Imsero General Manager.

Vladimir Hachinski, Canada – 'Dementia: New
horizons'.

15:00 – 16:00

Official Opening - Scientific Summit -

Official Opening with the presence of the
representatives of the co-organizers of Alzheimer's
Global Summit Lisbon 2017, holders of important
organs of the State and Portuguese Government
and other public bodies.

16:00 – 17:30

Round Table



Presence of representatives of the European
Commission and WHO.



SOCIAL HEALTH

18 SEP
DAY 1



SPEAKERS



MARIA DO ROSÁRIO ZINCKE DOS REIS

Degree in Law from the University of Lisbon; Lawyer since 1987, specially dedicated to the legal rights of people with incapacity; Member of Alzheimer Portugal Board; Trainer on legal rights at Alzheimer Portugal; Member of Alzheimer Europe Board.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 09:15 – 10:30

Current situation of Alzheimer's disease in Portugal

Dementia is not yet a national public health priority in our country. There is no national dementia plan or strategy or any specific legal framework for people with dementia.

Till now, no national awareness campaigns have been developed. There is no national specific helpline. Families are the main support and have to navigate by themselves on a very turbulent and unknown sea. There are only a few (profit or non profit) facilities specific for people with dementia. Little access to information, mainly in rural areas. No financial support and almost no relieve support for carers. There are no professional guardians or legal representatives.

This does not mean that people with dementia are completely unprotected or ignored. Some steps towards the effective promotion of their legal rights and quality of life have already been made during the last years, mainly by the civil society, specially by nonprofit organizations, just like Alzheimer Portugal:



a) - At primary care level, the growing number of “Family Health Units” is a significant bet on better quality and continuity of care, including care at home with specialized healthcare professional teams; b) - There is a growing number of new facilities specialized in dementia care; c) – There is an increasing awareness on the importance of specific training for family and professional carers.

It is also important to highlight that Portugal signed and ratified the main International Treaties on Human Rights, namely the United Nations Convention on Protection of Rights of People with Disabilities, and has a legal framework for advance directives. Unfortunately, although some promising initiatives (Elderly People’s Strategy approved by the Council of Ministers Resolution nº 63/2015 of 13.08; The Bill nº 61/XIII proposing to modify the incapacity legal framework) we did not yet move neither from a substitute to an assisted/supported decision-making approach nor to a functional assessment of legal capacity.

Anyway, there are two promising initiatives to face the challenges of dementia in Portugal and make it a national public health priority:

In line with the WHO" Global Plan of Action on the Public Health Response to Dementia 2017- 2025, whose second area of action is “awareness and friendliness”, Alzheimer Portugal, with the support of the Alzheimer Society UK and of some national partners, is preparing a Dementia Friends Campaign probably to be launched at the beginning of 2018 as it is the year of Alzheimer Portugal 30th Anniversary.

A document named “Bases for the Definition of Public Policies in the Field of Dementia”, prepared by a working group which was created within the framework of the reform of the National Network for Integrated Continuous Care, was delivered to the Secretary of State Assistant and of Health last July.

It includes recommendations to the government on the main priorities to be included in a future National Dementia Plan.



PABLO MARTÍNEZ-LAGE

Doctor of Medicine from the University of Navarra. Dementia Scholarship in the Department of Clinical Neurosciences at the University of Western Ontario under the direction of Professor Vladimir Hachinski. He has been an associate researcher in research projects on vascular dementia at the Hospital

Virgen del Camino (Pamplona), among others.

Since 2010 he has been working as head of the Neurology area at the Center for Research and Advanced Therapies of the Fundación CITA - Alzheimer Fundazioa in San Sebastián. Member of the Spanish Society of Neurology and the International Society of Vascular Cognitive Disorder (Vas-Cog). Coordinator of the Study Group on Neurology of Conduct and Dementias of the Spanish Society of Neurology and Member of the Dementia Panel of the European Federation of Neurological Associations.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 09:15 – 10:30

A current look at dementias in Spain

Spain is very close to present its National Alzheimer Plan. The National Reference Center for Alzheimer's Disease and other Dementias created and kicked-off the National Dementia Study Group that joined the efforts of all agents involved in the care and attention to persons with dementia in the country.

This presentation will review the results of the work developed by this National Dementia Study Group in the last two years together with other initiatives such as the kNow Alzheimer project and the MapEA Study to describe the current situation of dementia in Spain.



The presentation will review and provide new data on the epidemiology of dementia and mild cognitive impairment in Spain. Special attention will be paid to the situation of undiagnosed dementia and delayed diagnosis and their potential sources and areas of improvement. Similarly, the problem of diagnosed but still untreated patients as well as the limited access to non-pharmacological therapies will be discussed.

Other important aspects where significant targets of improvement have been detected and will be commented include aspects of diagnosis communication, extent of information and advice that patients and caregivers receive at the time of diagnosis, management of behavioural and psychological symptoms, coordination of social and sanitary resources or end-of-life decisions.

Finally, Spain is a fairly active country regarding research activities in areas such as epidemiology, genetics, early diagnosis, biomarkers, clinical trials or brain-banks. Different activities oriented towards the promotion and implementation of primary and secondary prevention of dementia strategies are also starting.



KARIN PALMLÖF

Karin was born in Sweden and licensed in Agriculture Engineering at the Swedish University of Agriculture, Ultuna.

After completing her master's degree in landscaping at the Technical University of Madrid, Karin worked in Buxus2002

landscaping studio, focusing on unique projects for urban and residential landscaping. In 2015 Karin founded Jardines Terapeuticos Palmlöf, a Project that integrates universal design with a nature based therapeutic methodology.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 10:30 – 12:00**

Gardens for outdoor therapies to promote independence in early stages of dementia

The nature based therapies is a unique resource that combines sensorial stimulation with cognitive and psychical activities. Evaluations show that persons with Alzheimer calm down, are less depressed, improve sleeping patterns and feel well being, when they have the possibility to be active in a garden. There is a trend in Scandinavia to implement health gardens in residential care homes and in public parks. This give opportunity for easy access to nature based therapies for groups with special needs, such as dementia, mental health and disabled. We have adapted the methodology used in nature based therapies to the Mediterranean culture and social climate, and we are currently introducing it in Spain. It is a secure modular design of the garden space where each module is associated with different cognitive o physical therapies that enables all caregivers to apply a Person/User centred Care, based on personal profile and life history while connecting with nature.

The methodology is developed from the results at the university of Alnarp, Sweden, which has been investigating in health gardens for more than 15 years. The main objective to be evaluated in the health gardens in Spain is the impact in life quality and autonomy at early stages of Alzheimer.



G. ALLEN POWER

Internist, geriatrician, and the newly appointed Schlegel Chair in Aging and Dementia Innovation at the Schlegel—University of Waterloo Research Institute for Aging in Ontario, Canada. He is certified by Eden Alternative Educator, he is a member of its board of directors and an international

pedagogue in the transformation of care models for the elderly.

He was appointed to the Scientific Committee of the Annual International Alzheimer's Conference in 2015. Dr. Poder worked in Italy with the Rockefeller Foundation (2012) on guidelines for the development of sustainable communities. He is an adviser to the Ibasho NGO of Dr. Emi Kiyota, a member of the board of directors of the Dementia Action Alliance and also an adviser to the Music and Memory project of Dementia Care Australia and the South Africa Care Forum.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 10:30 – 12:00**

The Eden Alternative® Framework for Well-Being and an Innovative Approach to Dementia

The Eden Alternative is the world's most extensive culture change organization for aged care, with a presence in over a dozen countries on five continents. Its primary mission is to improve the lives of elders, wherever they may live, through education and consultation. In this presentation, Dr. Power—a longtime Eden Educator and member of the board of directors—will review the origins of the model, its current structure, and basic principles.

He will then present a framework for seven domains of well-being that was developed with an Eden grant in 2005. Dr. Power will conclude by showing how this framework has helped him to develop an innovative approach to understanding distress in dementia that has helped organizations to significantly reduce and even eliminate the use of antipsychotic drugs for people living with dementia.



MANUEL CALDAS DE ALMEIDA

National Secretary of the Union of Portuguese Mercy. The Union of Portuguese Mercy (UMP) was created in 1976 to guide, coordinate, energize and represent the Holy Mercy Houses, defending their interests and organizing services of common interest.

He also has activity with varied institutional partners, and throughout his almost 40 years of existence, he has been able to anticipate various social problems, proposing, in this sense, adequate and effective solutions.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 10:30 – 12:00**

Project Lives of the Union of the Mercies

The UMP proposes providing environmental and professional competence specific to Long term care or home care , and formal and informal caregivers improve the care for people with dementia, in an efficient and cost-effective model plus, measurable and replicable.

- ◆ Establish a dynamic assessment model type "*tableau de Bord*" with environmental typology, HR; ESF allowing recognize General costs and tailored your existing developments.
- ◆ Develop intervention models promoting at the same time, a practice of dissemination, which can ensure the existence of specialized units of references and models of adaptation of LTC and Home care 's background.
- ◆ Use/exclusive allocation of pilot unit of Fátima on patients with dementia, seen to have a specialized environment and architecture and a team of distinguished level, in order to ensure teaching skills and specialized training and response to people with dementia with secondary manifestations and/or diagnostic and therapeutic needs.



The project LIVES, "enhancement and Innovation in Dementia", had the main objective to promote the adaptation of units Long Term or Home Care as regards care to their clients with dementia and cognitive changes. Developed into three components: research, training and environmental adaptation. Synergies between the three working groups was intended to meet the reality of dementia and of care in these institutions, and initiate environmental surface patterning and intervention of Human Resources skills.

The environmental component has established with the expert group criteria of adaptability of the spaces.

The training component has built a learning model with targeted impact assessment the three target audiences: Leadership; technicians and therapists; care givers.

The research component has integrated two distinct studies. The first study aimed to contribute to the characterization of the resident population in Residential Structures for elderly people (ERPI) belonging to the Union of Portuguese Mercies (UMP), regarding the prevalence of cognitive defect and dementia.

Given that focused on aspects of diagnosis of the situation, was designated by the acronym DIAG (*Study 1*). The second study was intended to contribute to the evaluation of the integral intervention project LIVES as described in the respective Protocol (training component), being designated by ENDORSEMENT (*Study 2*).



WILHELMINA HOFFMAN

Medical doctor specialized in geriatric medicine with focus on dementia. Currently, Headmaster and CEO of Stiftelsen Silviahemmet founded by H.M. Queen Silvia, – a foundation focusing on best dementia care and education for quality of life.

President of the Swedish Dementia Centre, the Swedish national competence centre for dementia, financed by The National Board of Health and Welfare.

Focus is dementia care for quality of life by development of education programs for professionals in health- and social care. Academic programs in corporation with the Karolinska Institutet and the Sophiahemmet Högskola. Free of charge web-based education programs connected to the national guidelines for best praxis. Accreditation system of education level in dementia care for units in health- and social care. Education programs and information material for persons with dementia and their families. Different projects and activities are also promoted by the two centres aiming at changing attitudes - toward a more dementia friendly society. SilviaBo - the most recent project aims at creating possibilities for persons with dementia to be able to stay longer in own housing. The apartments are built with knowhow about cognitive problems for safety and independence together with a IKEA and BoKlok, experts of interior design and housebuilding.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 10:30 – 12:00

SilviaBo - Cognitive adapted housing

To live with dementia a little longer in my own home and together with my loved one.



The start of this project was an idea that it should be easier to be able to live together as a couple in the own apartment, when one in the couple develop dementia.

A home built and decorated to be adapted to cognitive problems, with a look like a normal home and not costly. A garden to stimulate senses and activity was also included in the project. The project was initiated by Her Majesty Queen Silvia and the founder of IKEA, Mr Ingvar Kamprad, financed the start. *SilviaBo* is the result of a cooperation between three disciplines.

Dementia - from the knowhow of Silviahemmet about problems in daily life due to cognitive disorder and how small changes in the home can mean a lot for independence and safety. **Housebuilding** – by BoKlok, experts of building apartments in cost effective way with good quality. **Interior design** – in cooperation with IKEA.

From the start in November 2015 several meetings were held between the three disciplines. How can housebuilding, apartments be designed in the best way for persons with cognitive problems. What must be changed compared to normal apartments? What type of furniture, colours etc can make daily life easier for the person with dementia? The result is eight apartments in two houses. Each apartment is 55 square meters. One apartment is called *SilviaBo bas* and is a fully decorated apartment showing furniture and solutions for an ordinary home. Another is called *SilviaBo vision* and is a showroom for smart solutions for the home, small and larger, technical products and innovations. The other six apartments are mainly for persons attending the day-care centre. They can rent the apartment together with their husband or wife when there is need of better housing to cope with the situation and to avoid placement in a nursing home. The *Silviahemmet* day-care centre is situated in the same area, less than 100 meters away.

Municipalities have already shown interest in building *SilviaBo* apartments when there is a need of better housing for many elderly and when it is costly to rebuild old apartments.



MERCÉ BOADA

Mercè Boada is founder and medical director of the ACE Foundation. Institut Català de Neurociències Aplicades. She directed the Neurodegenerative Diseases Unit of the Neurology Service of the Vall d'Hebron University Hospital and was Head of the

Alzheimer Research Group at the Vall d'Hebron Research Institute (VHIR).

Coordinator of the "Model of Care for People with Dementia" of the Catalan National Health System, she was Technical Secretary of the Psychiatric Council of Catalonia (1996-2001), President of the Pharmaceutical Advisory Council for Alzheimer's Disease 1996-2001), member of Bioethics Committee of Catalonia and member of the Ministry of Health of the Consultative Board of the Government of Catalonia.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 12:30 – 13:15

The Art of (NO) Lose

The clinical evolution of Alzheimer's disease (AD) is well-founded in a subtle and progressive loss of cognitive functions, in which the memory chairs the symptomatic courtship. Even today the AD can be defined as a losing process, from the benign forgetfulness himself I. The art of losing isn't a hard of master.

The art of **(NO)** losing is a hard of master.

Global Alzheimer's disease (AD) research is at a critical time. The global society is increasingly aware of the frightening rate of growth of the human and financial burden caused by this condition, and of the urgent need to halt its progression.



In the wake of this increased sense of urgency, society is calling for increased action and governments worldwide are responding by recognizing dementia as a public health priority and increase funding and define strategies to defeat AD.(MCI) specifically ask for biomarker-based prediction of AD.

Today, a rapidly growing number of individuals with mild cognitive impairment (MCI) specifically ask for biomarker-based prediction of AD. Consequently the scientific community holds great responsibility to quickly put in place and optimize the machinery necessary for testing new treatments or interventions. In clinical practice, specialist increasingly offers predictive diagnosis to patients. However, the expectations and attitudes of patients and their caregivers are yet widely unknown.

For its success, it is necessary that researchers establishing contact understand the culture of the community and maintain direct and stable contact. The concept of community based participatory research (CBPR) defines a structured and bidirectional methodology of community outreach that endeavors to reduce the distance between researchers and a community by establishing a forum of mutual communication and learning. Investigators inform of research results with the objective of causing a positive impact in the health of the community and so its members understand the importance of scientific research and the principles it is based on.

Social, clinic and basic research in AD is moving forward to detect hidden individuals at the earliest stages of the disease and, why not, look for volunteers asymptomatic individuals to understand cause and consequences of this complex polyhedral process and to establish a definitely the new status of the art of **no** losing.

The aim of this update is to learn about the specific attitudes and expectations towards prediction and prevention AD as well as future new topics for improve their quality of life.



HABIB CHAUDHURY

Director and Professor in the Department of Gerontology, Simon Fraser University, Canada, he has extensive research experience in the field of Environmental Gerontology. He has conducted research and consulting in areas such as: the physical

environment for people with dementia in long-term care facilities, memories of home and self in dementia, community planning and urban design for active aging.

Dr. Chaudhury has more than 60 articles in peer reviewed journals, book chapters and monographs. He is also affiliated with the Center for Research on Personhood in Dementia at the University of British Columbia, Vancouver and Alzheimer's Catalonia, Barcelona, Spain. He received the Simon Fraser University Excellence in Teaching Award in 2014. Recently, the Gerontological Society of America (GSA) awarded him Fellow status in the society.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 14:30 – 15:15**

Design Matters: Developing Responsive Physical environment for People with Dementia in Long-Term Care Facilities

The physical or built environment (e.g., architecture, interior design) plays a fundamental role in creation of a therapeutic living and care setting for persons with dementia.

Unsupportive physical environmental features can contribute to “challenging” behaviours in people with dementia.



For example: spatial disorientation, anxiety, agitation, social withdrawal. Conversely, a positive environment can reduce responsive behaviours and enable positive engagement, e.g., reduce anxiety, agitation, disorientation, increase personal autonomy.

The physical environment must be recognized as an important component in transformation of the predominant culture of long-term care settings. The physical setting can be person-centred by being responsive to a person's cognitive functioning, sensory changes, preferences, lifestyle patterns and biography.

This presentation will provide an overview of the key environmental design principles that can support residents' quality of life and well-being in a long-term care setting.

The goal of this presentation is to provide evidence-based information to equip long-term care facility administrators, care staff, facility planners and design professionals with the knowledge base to understand the importance of a responsive physical environment in person-centred dementia care. After the session, participants will be equipped to make informed decisions in making small-scale environmental changes, as well as plan for medium-major renovations that would optimize residents' quality of life in a care facility.

Objectives: a) to identify typical problems in the physical environments of typical care homes for people with dementia, b) to understand and appreciate the role of therapeutic goals and environmental design principles in dementia care, and c) to make informed decisions in planning and design for renovations in existing care facilities or planning and design of new care facilities.



MAYTE SANCHO

Scientific Director of the Matía Foundation Gerontological Institute and Director of the Study of Prevalence of ill-treatment among people over 60 in the Basque Country. Immersed in different projects and studies of aging among which stand out Active Ageing

Index Project (Calculus for Euskadi). Study-Diagnosis of the city of San Sebastián, for inclusion in the World Network "Age Friendly Cities", coordinated by the WHO or The document "100 proposals to improve the well-being and good treatment of aging people" of the Basque Government. Her research work has led him to live different pilot experiences in residences of elderly people and experience Etxean Ondo homes in Guipúzcoa and Álava.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 15:15 – 16:30

Model of care centered on the person. Experience Matia Foundation

In countries of Anglo-Saxon and Scandinavian tradition, several decades ago it was assumed the need to move from traditional residential models from a combination of cultures, traditional disciplinary hospital and hotel, to the promotion of a set of initiatives in which the domestic environments and the attention centered in the people form the central axes of a model of lodging and of life of quality for people with dementia. In fact, research from different disciplines around the housing paradigm on the aspects that actually construct the "sense of the home concept", the perception of the "home" occupy an important part of the gerontological scientific literature, which tries to improve the quality of the daily lives of people in nursing homes (Calkins M, 2008, Hund et al 2015).

There is sufficient evidence to conclude that "home" housing, with a limited group of residents, stable staff and in which daily activities are performed according to the wishes of the residents, have beneficial effects for residents, families and workers.



Spain, already in the 1990s presented such initiatives, as a proposal for a distant future. But it was a priority to build a residential model professional, and some quality, non-existent at that time. It is now when initiatives begin to proliferate that, while respecting the relevance of the clinical and care aspects of residential care, are giving way to others that revolve around the postulates of the person-centered care model. Since 2010, Matía Foundation (created in 1859) has played an important role in this process of sustainable cultural change (Pioneer Network), which responds to the expectations of people who today and in the future want to be treated with professionalism, but also with dignity and "at home". This process involved a significant complexity and added difficulties of normative character, has progressed in three main areas:

- ◆ Incorporation of environmental changes, based on respect for the privacy of individuals and the value of "domestic it" and "sense and perception of House" in the nursing homes (Chaudhury H et al... 2005-2017. Bigonnesse C, et al.(2014). The reorganization of traditional centers into units of coexistence and the design of physical environments that promote independence and well-being is identified as a key aspect of this process.
- ◆ Organizational changes, which began by the elimination of the rotation of workers, flexibility in everyday tasks. Is currently facing a deep process in the transformation of roles and in the work of identification and consensus of values who preside over daily life. Work based on trust relationships and not so much control and security is a highly complex challenge.
- ◆ Reformulation of the gerontological professional interventions from the identification of values, preferences and interests of the people, good treatment and development of significant activities of everyday life with therapeutic value. (Shier V, Khodyakov d et al, 2014, Sancho M ,Yanguas J 2014, Femke,B et al 2014. Edvardsson, D, 2008.,).

Advancing this process imposes the coping of other complex challenges:

- ◆ Get the participation of people living in our centers with very advanced dementias.
- ◆ Involve workers and families in this process.
- ◆ Obtain sufficient scientific evidence on the impact of the interventions we are carrying out.
- ◆ Design evaluation tools that fit this work methodology.



JOSÉ MARÍA GARCÍA-ALBERCA

Specialist in Psychiatry and Specialist Psychologist in Clinical Psychology. Doctorate in Neurosciences by the University of Málaga. For more than twenty-five years he has lived and worked in Málaga where he has developed his clinical, teaching and research activity.

Dr. García-Alberca works as Scientific Director at the Andalusian Institute of Neuroscience (IANEC), considered as an institution of reference in Spain in the investigation, diagnosis and treatment of Alzheimer's disease and other dementias. In turn, he is a professor at the Faculty of Medicine of the University of Málaga, where he teaches at the same time as he participates in the Doctoral Programs in Neurosciences of said University. He is also a visiting professor at the University of Cadiz where he teaches postgraduate university education. He is a member of the research group attached to the Cognitive Neurophysiology Unit of the Medical-Sanitary Research Center (CIMES) of the University of Málaga. He has published numerous original articles of investigation in magazines of impact of international scope. He is also the president of the organizing committee of one of the most important congresses dedicated to dementia in our country, such as the Malaga Alzheimer Conference.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 15:15 – 16:30

Behavioral disorders in people with dementia

Alzheimer's disease (AD) is the most common form of dementia characterized by gradual progressive cognitive impairment, as well as progressive impairment in activities of daily living. In addition, many AD patients develop behavioral and psychological symptoms of dementia (BPSD) that are considered to be equally important.



BPSD are present in all stages of AD, such that almost all patients with AD will exhibit such symptoms, including delusions, hallucinations, depression/dysphoria, agitation/aggression, anxiety, elation/euphoria, apathy, disinhibition, irritability, aberrant motor behavior and personality alterations, at some point during the course of the disease. BPSD have important negative consequences, including a reduced quality of life in both patients and caregivers, an increase in functional impairment and a more rapid cognitive decline, a higher than average consumption of psychoactive drugs among primary caregivers and a higher cost of care. Moreover, BPSD increases caregiver burden and distress, and in many cases precipitate the institutionalization of the patients to a nursing home placement.

A complex interaction of biological, psychosocial, psychological and environmental factors contributes to the development and presence of BPSD in AD. From a biological perspective, progression in brain pathology is associated with the emergence of BPSD over the course of AD. Three broad, psychologically-oriented paradigms have been proposed to explain BPSD and to generate testable interventions to limit their negative consequences. The Unmet Needs Paradigm proposes that people with dementia are unable to express their human normal needs -physical, emotional and social- and therefore react to adverse situations with inappropriate behaviors that may be disturbing to others. The Progressively Lowered Stress Threshold Model proposes that dementia reduces the capacity to cope with stress, decreasing progressively the threshold for stress or stimuli and that, when this threshold is passed, inappropriate behaviors may become manifest. The Learning Theory asserts behaviors can be influenced and reinforced when caregivers reward them.

The treatment of BPSD is complex and may require several interventions applied as part of a comprehensive plan of care. Current management of behavioral disturbances involves non-pharmacological interventions, as well as pharmacological interventions. Non-pharmacological interventions should always be used as a first-line treatment in the management of BPSD. Systematic literature review shows that Person-centered care for people with dementia significantly improves BPSD when compared with usual care.



DEBBIE TOLSON

Director of the Center for Alzheimer's Policy and Practice since 2013 and Professor of Gerontological Nursing and Researcher at the Interdisciplinary Group of the Institute of Applied Health Research at the University of the West of Scotland.

A leading nurse with an international reputation, her contribution in research with seniors was recognized in 2010 by the University of St Louis (USA) through the Medical School with the Jim Flood Memorial Alzheimer Disease Distinguished Lectureship Award. She is a member of the Royal College of Nursing UK and an honorary member of the Queen's Nursing Institute.

She received the 2007 Sigma Theta Tau International Award for Best of Visions on Evidence-Based Nursing. With more than 100 research articles reviewed, she is international advisor for nurses and patients.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 18th, 15:15 – 16:30**

Improving Advanced Dementia Care: Lessons from the European Palliare Project

Late stage or severe dementia is often associated with end of life care. The Palliare Project highlights that a more nuanced understanding of advanced dementia is needed with a focus on living rather than dying.

Dementia symptoms in the later stages are complex and although the term 'advanced dementia' is widely used there is a lack of clear definition (Hanson et al 2016). Notable exceptions are Alzheimer Scotland's Advanced Dementia Practice model (Alzheimer Scotland, 2015) and Palliare (Holmerova et al., 2016).



Both of these frameworks recognise that people can live with advanced dementia for months and sometimes years with dementia specific extended palliative care needs associated with diseases such as Alzheimers.

The Palliare project was undertaken by a partnership of 7 countries and involved 11 work streams. The first phase of the project sought to develop an inter-professional understanding of best practice for advanced dementia care and family caring, and an understanding of the contribution of different disciplines to the achievement of best practice.

The second phase focussed on developing an interprofessional learning framework (Tolson et al 2017) to equip the European qualified dementia workforce to transform advanced dementia care and deliver best practice.

This talk begins with an overview of the project and key findings before focussing on a Best Practice Statement detailing ideal advanced dementia practice using a new positive approach called 'Palliare' aimed at supporting individuals to live the best life possible and to sustain family caring.

The final phase of the project established an experienced based interprofessional learning framework (Tolson et al 2017) including an international online community of practice and four 'Palliare' Modules. In combination these have the potential to equip qualified practitioners, such as doctors, nurses, allied health and social care professionals to champion change and achieve the delivery of best advanced dementia practice based on the Palliare model.

A key learning point is that current practice, existing care services and approaches to dementia education seem to perpetuate the 'inverse care law' where those who need the most care receive least (Tolson et al 2016).



SOCIAL HEALTH

19 SEP
DAY 2



CHARLES SCERRI

Charles received his doctorate in 2004 from the University of Dundee, Scotland, and currently teaches neuropharmacology at the University of Malta. He is co-founder and general secretary of the Dementia Society of Malta, former Honorary Secretary and current Alzheimer's Vice-President of Europe and

member of the Alzheimer's Mediterranean Alliance. He is also a member of the Scientific Advisory Board of JPND and INTERDEM. In July 2013, he was appointed National Focal Point on Dementia in Malta. Recent publications include the national strategy paper on dementia: "Empowering change: a national strategy for dementia in the Maltese islands (2015-23)".

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 09:00 – 10:15**

Europe's Commitment to Alzheimer's - The Situation of the Alzheimer's National Plans in Europe

Dementia is a growing concern in countries facing an ever-increase in the elderly population. In 2015, dementia affected around 10.5 million citizens aged between 30 and 95+ years of age in Europe with this figure being estimated to reach 13.5 million by 2030. This will invariably lead to a significant and continuous demand on national health care services and the society in general as most care-giving is provided by close relatives living in the community. Furthermore, the total cost is also expected to rise dramatically in the coming decades. As a result, a significant number of European countries decided to launch their national dementia plans that comprise a number of measures aimed at improving the quality of life of individuals with dementia, their caregivers and family members. These include an increase in awareness and understanding of dementia, the provision of timely diagnosis, the availability of a trained workforce, improving dementia management and care as well as strengthening research in this field. However, despite this increased effort and attention, there remain considerable differences between European countries. This intervention will highlight the current state of play in dementia policy development in Europe.



ÁLVARO CARVALHO

Psychiatrist, head of the psychiatric service of the Hospital Medical Career, Group analyst and Psychoanalyst. Professor of mental health and psychiatry at the Faculty of Medical Sciences (Universidade Nova Lisboa).

He was National Coordinator for Mental Health and Director of Health Services of the DGS, where he collaborated with the Integrated Support Program for Elderly PAll in the structuring of a "Regulatory Guidelines for coordinated interventions of social support and continuous care directed to Persons in a situation of dependency", aimed at people in situations of physical, mental or social dependence.

Since 2010 he is responsible for the coordination team of the Project on Integrated Continuing Care of Mental Health and since 2013 coordinates the creation of the National Action Plan on Dementias of Portugal.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 09:00 – 10:15**

Portugal: Structuring the national intervention plan on dementias

Although Portugal is one of the EU countries with the highest rate of elderly population, it has not given the necessary attention to the problems of aging, whether in health or in social terms, particularly in relation to dementia. In order to change this situation, the National Mental Health Program (PNSM) of the Directorate-General of Health in 2013 began the structuring of a national plan for intervention in dementia, based on three axes: Training, Research and Inter-ministerial Articulation, which integrated: a) In 2013, the Seminar "Structuring the National Plan for Intervention in Dementia Disorders", with the scientific coordination of Prof. Joel Ménard, Chairman of the Drafting Committee of the French Plan for Dementia of Alzheimer's and related diseases.



It brought together national experts from the medical and social sectors, promoting a preliminary discussion of strategies for dementia in Portugal; b) in 2014, the Second Seminar on the same theme. In the meantime, the Government in 2015 approves the Protection Strategy for the Elderly. In the scope of policy and service research, the participation of Portuguese teams in projects of a European initiative, such as Actifcare - Acces to Tlmely Formal care or RHAPSODY - Research and Strategy for Dementia in the Young, multicentric studies that will contribute to International and national recommendations on formal care for people with dementia and their families in the community (Actifcare) or disseminate relevant psychoeducational materials, especially in the early dementias (RHAPSODY).

However, the PNSM financially supported 2 studies: a) one in the North Region, with samples of primary care users and in homes for the elderly, which shows a relevant proportion of cognitive deficit; b) another which estimated the frequency of dementia cases in formal care settings. The results suggested 20.1% in men and 23.9% in women, in day centers and 34.2% in men and 40.1% in women in homes for the elderly.

The PNSM also sponsored the VIDAS (Valorisation and Innovation in Dementias) project of the Union of Portuguese Misericórdias, which promoted the adaptation of homes for the elderly and home support services to people with cognitive deficits. In addition to action-research components in the training of formal caregivers and environmental adaptation, the frequency of cognitive changes suggestive of dementia in a sample of 1503 'home' residents was estimated at 78% after neuropsychological evaluation by trained interviewers and taking into account available clinical information. Also with funding from the PNSM, Alzheimer Portugal developed in Lisbon the formation of teams of Primary Health Care that provide home support to people with dementia. In October 2016, a working group was set up in the Office of the Assistant Secretary of State and Health to define "a reference framework that allows the design of care pathways for people with dementia, taking into account the specific characteristics of the National Service of Health, the social protection system and the characteristics of the social and solidarity fabric". The final report proposing a National Dementia Plan has just been completed.



JESÚS MARÍA RODRIGO

Bachelor of Philosophy and Educational Sciences, he has developed his professional activity in non-profit organizations performing different functions of responsibility. Currently, since 2005, he is the Executive Director of the Spanish Confederation of Associations of

Relatives of People with Alzheimer's and other Dementias CEAFA, entity that groups more than 300 Associations whose raison d'être is to improve the quality of life of those who live together With Alzheimer's disease.

Working and collaborating directly with the Board of Governors of the entity, he has supported the development of the different strategic plans of the organization that are enabling CEAFA to be positioned as a reference entity to the Central Government within the framework of the definition of the Policy Of Alzheimer's disease. Member of the Board of Alzheimer Europe and Alzheimer Latin America. At present, member of the coordination committee of the dementia group, responsible for the development of the national Alzheimer's plan in Spain.

Global Summit Alzheimer's Research & Care (Lisbon 2017)

September 19th, 09:00 – 10:15

Advances in Spain. The State Dementia Group and the role of the social fabric

Alzheimer's disease is a social-health problem, which requires a response or comprehensive approach in which all the tied agents must intervene; the responsibility lies not in a group only, but in all.

Although this responsibility has to be shared, there is a group especially sensitized and motivated to assume a certain commitment of leadership, which is none other than the one formed by the people affected, who live day by day with the disease and its consequences; Therefore, they are key stakeholders in "defeating Alzheimer's".



This interest is what has moved relatives and patients to take an active, demanding and persistent role over time in order to advance towards the Alzheimer's State Policy that this country needs; while other states of our closest environment bring us a considerable advantage in terms of National Alzheimer's plans, Spain lacks a specific policy that addresses this socio-health problem. For this reason, for many years now, the Spanish Confederation of Alzheimer's has adopted the banner of working for this country to have a specific Alzheimer's Plan; a commitment that has also been taken up by the Institute of Older Persons and Social Services (IMSERSO), which in 2013 launched the State Dementia Group, understood as the multidisciplinary forum from which to tackle Alzheimer's.

Recognized by 2015 and relaunched in 2017, the State Dementia Group has collected witness of the Spanish National Plan of Alzheimer's; this year, it has assumed and rushed an important and intense work review, analysis and research, but, above all, of participation. As a premise or starting point, it has been tried that absolutely all the actors related, directly or indirectly, with Alzheimer's had the opportunity to make their contributions to give meaning to the following four axes:

- ◆ Information, awareness and transformation of the environment.
- ◆ The person in the Centre of the socio-health care: prevention, diagnosis and treatment.
- ◆ Rights, ethics and person.
- ◆ Research, innovation and knowledge.

And, this, under the umbrella of the consideration of Alzheimer's as a socio-health priority of the first order.

Following the guidelines of the World Health Organization, the State Dementia Group is working to advance towards the objective pursued by CEAFA (and by all the people it represents) of having a National Alzheimer's Plan. Having this Plan, obviously, is not going to solve the particular problems that people are every day (at least in the short term); but it will allow to order the efforts, the resources and, above all, the work of the different professionals involved to guarantee the fulfillment of the rights that the people who live with the Alzheimer's have to access the resources, services and specific attentions that require in the different moments of evolution of the disease.



TAKANORI SHIBATA

Ph.D. and Chief Senior Research Scientist, Human Informatics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST) & Professor School of Computing, Tokyo Institute of Technology & Visiting Fellow The AgeLab, Massachusetts Institute of Technology.

Prof. Takanori Shibata was born in 1967 and received B.S., M.S. and Ph.D. in Electronic and Mechanical Engineering from Nagoya University in 89, 91 and 92, respectively.

He was a research scientist at AIST from 93 to 98. Concurrently, he was a visiting research scientist at the Artificial Intelligence Lab., Massachusetts Institute of Technology from 95 to 98, and a visiting research scientist at the Artificial Intelligence Lab., Univ. of Zurich in 96. At the AIST, Dr. Shibata was a senior research scientist from 98 to 13. Concurrently, he was the Deputy Director for Information and Communication Technology Policy, Bureau of Science, Technology, and Innovation Policy, Cabinet Office, Government of Japan from 09 to 10.

Since 2013, he has been the current positions. His research interests include human-robot interaction, robot therapy, mental health for astronauts in long-term mission (e.g. to Mars), and humanitarian demining. He was certified as the inventor of a seal robot named PARO, the World's Most Therapeutic Robot, by Guinness World Records in 2002. He has received many awards including the Robot of the Year by Ministry of Economy, Trade and Industry, Japan in 2006, The Outstanding Young Person (TOYP) of the world by Junior Chamber International (JCI) in 2004, and the Japanese Prime Minister's Award in 2003.

In 2015, PARO was awarded the "Patient Trophy" as innovation of non-pharmacological therapy for dementia by the AP-HP (Assistance Publique - Hôpitaux de Paris), France, that is one of the largest medical group in the World.



Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 10:30 – 11:15

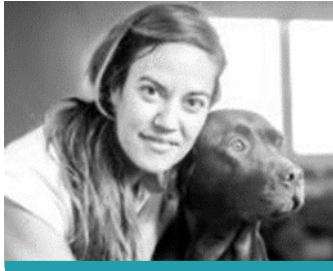
Neurological Therapeutic Medical Robot, PARO, for Non-pharmacological Therapy

Robot therapy, which uses robots as a substitution for animals in “animal therapy,” is a new robot application in the fields of welfare and patient care. The baby seal robot “PARO” began development for robot therapy in 1993. More and more clinical trials including randomized controlled trials (RCT) have revealed that robot therapy has similar effects on patients as animal therapy. PARO was commercialized in Japan in 2005, and in Europe and the U.S. in 2009, and about 5,000 PAROs have been used in hospitals, care facilities and at homes in more than 30 countries.

Especially, PARO was evaluated in a national project of dementia care in Denmark from 2006 to 2008, and the results showed that PARO was very beneficial for the elderly with dementia, caregivers and therapists. Now, 80% of municipalities of Denmark have already adopted PARO in public dementia care. In 2009, the U.S. Food and Drug Administration (FDA) certified PARO as a “neurological therapeutic medical device” in biofeedback devices. PARO can be used in various kinds of therapy similar to real animals, such as palliative and hospice care for cancer patients and training of social skill of children and adolescences with developmental problems.

There are a lot of evidences of therapeutic effects of PARO on elderly with dementia because explicit differences can be easily observed before and after interacting with PARO.

The therapeutic effects on the elderly with dementia interacting with PARO include improvement of anxiety, depression, pain, loneliness, wandering, agitation, aggression, sleep and quality of life, reduction of stress and blood pressure, and recovery from speech disorders. With these effects, PARO can reduce usage of psychotropic medications as non-pharmacological therapy. PARO can also reduce burden of care and nursing, and social cost of medical and welfare services.



ELISA PÉREZ REDONDO

Social Worker, university master in Intervention with People with Alzheimer's, Animal assisted therapy technician, assistance dog trainer. Elisa Pérez is responsible for the program of Animal assisted intervention in CRE Alzheimer's of IMSERSO in Salamanca.

Author of the Guide: Dog-Assisted intervention in Persons with Dementia and Principal Investigator in the Studies: 'Effects of Dog-Assisted Intervention on Psychological and Behavioral Symptoms in Dementias', 'Effects of Dog-Assisted Intervention on Behavior Social and emotion', 'Effects of dog-assisted intervention on apathy, depression and QOL in PWD and 'Comparison of responses to a robotic stimulus (PARO) and a dog in people with Alzheimer's disease and other dementias'.

**Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 11:15 – 12:30**

Dog-Assisted intervention in Persons with Dementia. Experience in the CRE of Alzheimer. Imsero

The relation of human and animals is united from the beginning of time, but it is from the 1960s when we began to find research in the field of the therapeutic benefits in human-animal interaction (Aubrey H. Fine 2003). One of the first studies showed how the interaction with animals promotes social contact of people with moderate Alzheimer's disease, increasing the number of smiles, laughs, inclinations, physical contact and verbalizations (Kongable, Buckwalter and Stolley 1989; Marx Et al., 2010).

Churchill, Safaoui, McCabe, and Baun (1999) concluded in their study about the effects of Dog Assisted Therapy (DAT) in people with dementia, that the number of agitated behaviors may be decrease with the presence of a therapy dog.



Likewise, they found a significant increase in social behaviors such as physical contact, inclinations, smiles, verbalizations and looks. There was also an increase in the duration of smiles, looks and verbalizations.

Other studies have found that DAT can produce an improvement in emotional state in people with dementia (Mossello et al., 2011; Kawamura, Niiyama and Niiyama, 2007).

The conclusions of different studies shows how Dog Assisted Therapy can be used as a non-pharmacological therapy in people with dementia.

The National Reference Centre for Alzheimer's and Dementia Care of the Imserso, belonging to the Health, Social Services and Equality Ministry, under the auspices of the Spanish Government, is a state resource, specialized in management, generation and transfer of knowledge about documentation, analysis, research, validation, training and promotion in the use of non-pharmacological therapies, as well as models of intervention focused on the concept of quality of life for people with Alzheimer's and other dementias, their families and / or care institutions.

To achieve its aims, the Reference Centre performs a dual mission: specialized care for people with the disease and other dementias and their families or main caregivers, also being a reference model destined to research, promotion and support of other resources in the area.

Since 2012 the National Reference Centre for Alzheimer's and Dementia Care has begun to develop different studies about Dog Assisted therapy in people with dementia: 'Effects of Dog-Assisted Intervention on Psychological and Behavioral Symptoms in Dementias', 'Effects of Dog-Assisted Intervention on Behavior Social and emotion', 'Effects of dog-assisted intervention on apathy, depression and QoL in PwD and 'Comparison of responses to a robotic stimulus (PARO) and a dog in people with Alzheimer's disease and other dementias'.



AIMEE SPECTOR

Aimee Spector is a PhD in Clinical Health Psychology at University College London. Expert in Clinical Psychology of older people, psychological therapies and quality of life in dementia. Dr. Spector originally developed Cognitive Stimulation Therapy (CST) for people with dementia.

She coordinates the International Center CST and develops the CST training course, having trained more than 2000 people in CST. She has authored numerous academic publications on CST and four CST training manuals. She has continued to supervise academic research on CST and other psychosocial interventions for dementia, as well as Cognitive Behavior Therapy. She works in the Department of Clinical, Pedagogical and Health Psychology (University College London).

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 11:15 – 12:30

Cognitive Stimulation Therapy (CST) for mild to moderate dementia

Cognitive Stimulation Therapy (CST) is a brief, evidence-based, effective and cost effective intervention for people with mild to moderate dementia. Developed in the UK, it involves 14 sessions (over 7 weeks) and aims to improve cognitive function through themed group activities.

Sessions implicitly stimulate skills including memory, executive function and language through tasks such as categorisation, word association and discussion of current affairs. It is built upon several theories including learning theory and brain plasticity; which suggest that appropriate and targeted mental stimulation, for example through building new semantic connections, can lead to the development of new neuronal pathways.



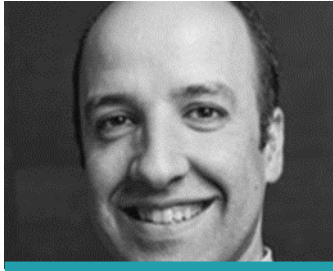
Sessions follow a set of guiding principles which include 'mental stimulation', 'new ideas, thoughts and associations' and 'opinions rather than facts'. It is now being evaluated and used internationally.

This presentation will provide an overview of the CST research programme to date and outline current international CST research and implementation. This includes an initial randomised controlled trial (Spector et al, 2003), which found significant improvements in both cognition and quality of life when comparing CST to usual care (n=201), improvements in cognition similar to those found using Cholinesterase inhibitors and cost-effectiveness. An RCT of the 'Maintenance CST' programme (n=236) demonstrated significant long term improvements in quality of life after 6 months, activities of daily at 3 months and cost effectiveness (Orrell et al, 2014; D'Amico et al. 2015).

Qualitative interviews (Spector et al, 2011) showed that positive experiences of being in the group were highly valued, with benefits in everyday life including improvements in concentration and alertness.

The recently published results of a trial of Individualised CST (Orrell et al, 2017) will be presented. This trial (n=356) showed that caregiver led CST resulted in significant improvements in the patient-caregiver relationship, although the benefits to cognition and quality of life seen following group CST were not present.

These differences will be explored and linked to ongoing research, which further explores the mechanisms of action in CST (e.g. Wong et al, 2017).



ALBINO J. OLIVEIRA-MAIA

Albino Oliveira-Maia obtained the title of doctor in the University of Porto and the doctorate in Neuroscience, developed in the University of Duke, under the supervision of the professors Miguel Nicolelis and Sidney Simon.

After returning to Portugal, Albino graduated in Adult Psychiatry from the University Department of Psychiatry from the University Department of Psychiatry at the NOVA School of Medicine in Lisbon.

During his residency, he devoted himself to postdoctoral training in the Champalimaud Neuroscience Program, under the supervision of Professor Rui Costa, and completed a Master's degree in Public Health at the Harvard School of Public Health in Boston with Professor Álvaro Pascual-Leone.

He currently coordinates the Neuropsychiatry Unit of the Clinical Center of Champalimaud and is a Psychiatrist and Visiting Professor of Psychiatry in the University Department of Psychiatry of the NOVA School of Medicine.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 11:15 – 12:30

Combined rTMS with Cognitive Training for Alzheimer's Disease

Cognitive interventions have been increasingly explored as potential therapies for Alzheimer's Disease (AD), but have yielded inconsistent results. Altered neuroplasticity in AD patients could underlie insufficient response to cognitive training and rehabilitation.



Transcranial magnetic stimulation (TMS) provides a safe and noninvasive means to modulate neuroplasticity in brain areas thought to be implicated in the cognitive and behavioral dysfunctions of AD.

Indeed, some studies have reported improvements in cognitive functions after either repetitive TMS (rTMS) or transcranial direct current stimulation, while some found no improvement.

These approaches have primarily focused on the use of brain stimulation alone, and have targeted only single cortical regions and isolated cognitive functions. However, targeting specific brain regions with TMS while they are engaged in cognitive training may lead to enhanced functional improvements.

In fact, the combination of rTMS with cognitive training has been shown to have therapeutic promise in two open trials and two randomized controlled trials (RCT), comparing real intervention with sham TMS and sham cognitive training.

We have obtained further evidence to support the efficacy of this intervention in an additional RCT, and a large multicenter multi-site clinical trial is currently underway in the U.S. and in Israel. If, as expected, the efficacy of this intervention is thus confirmed, novel challenges will arise regarding access of AD patients to this innovative non-pharmacological treatment.



VLADIMIR HACHINSKI

Vladimir Hachinski, CM O(Ont) MD DSc FRCP(C) FRSC Doctor honoris causa X4 Distinguished University Professor of Neurology Western University, Canada, earned an MD from the University of Toronto and trained in neurology and research in Montreal, Toronto, London, U.K. and Copenhagen.

His main interests include the relationship between cerebrovascular and Alzheimer disease and the joint prevention of stroke and dementia. The research involves converging experimental, clinical and epidemiological approaches. A complementary interest is brain heart interactions and outcomes, including sudden death.

He and his colleagues, in a whole population study, showed a decrease in the incidence of dementia concomitant with a decrease in the incidence of stroke. Based on this and other data, all the major organizations dealing with stroke and dementia have endorsed a Proclamation calling for the joint prevention of stroke and dementia. He has authored, co-authored or co-edited 17 books and over 700 publications and has been cited over 34,000 times and has a Hirsch Index of 85 (Web of Science). He was Editor-in-Chief of STROKE for an unprecedented 10 years, President of the World Federation of Neurology and Founder of the World Brain Alliance.

Global Summit Alzheimer's Research & Care (Lisbon 2017)
September 19th, 12:40 – 13:00

Dementia: New horizons

Recent developments are unveiling new horizons and opportunities in the fight against dementia.



Brain resilience

Although our focus has been on cognitive decline and brain pathology, the remarkable fact is that about one third of elderly individuals have significant brain pathology but no cognitive impairment. This resilience may be subject to interventions to enhance it.

Aging

Aging is the most powerful risk factor for developing dementia. Methods for measuring biological aging and promising avenues to slow it, are being pursued.

Big data analyses

Data driven analyses of the Alzheimer Disease Neuroimaging Initiative Study (ADNI) suggest that the first step in developing Alzheimer disease of late onset, is vascular dysregulation, an unexpected, novel and promising finding.

Joint prevention of stroke and dementia

The finding that by preventing stroke we can prevent some dementias at the population level and other evidence, led the World Stroke Organization to update its Proclamation to include potentially preventable dementias. This Proclamation has been endorsed by all the main organizations dealing with stroke and dementia, including Alzheimer's Disease International, the Alzheimer's Association, the World Federation of Neurology, the World Psychiatric Association, the World Heart Federation, the International Brain Research Organization, the European Academy of Neurology and 15 other international, regional and national organizations.

We need to broaden our approach to dementia by complementing our current reductionistic strategies with complex system analyses, pursue the new findings of vascular dysregulation in the Alzheimer process, and expand the joint prevention of stroke and dementia right now.



**ALZHEIMER'S GLOBAL
SUMMIT LISBON 2017**