MiCOG
Education program for the diagnosis and management of Mild Cognitive Impairment

Educational Program

Learning Objectives:

Upon completion of the education course, learners will:

- increase their knowledge regarding the definition, epidemiology, risk and protective factors
- learn to describe the main screening and assessment tools used for MCI and how to diagnose it.
- be able to describe the therapeutic strategies to manage MCI

MODULE 1: Epidemiology of Mild Cognitive Impairment: From Risk Factors to Prevention

Coordinator: Dr Alberto Pilotto

		Faculty:
1.1.	**Multidimensional Approach to Cognitive Impairment in Older Adults**	Alberto Pilotto
1.2.	**Epidemiology of Mild Cognitive Impairment**	
a.	Prevalence and Incidence of MCI Across Diverse Populations	Thomas Rune Nielsen
b.	Clinical and Demographic predictors of Progression from MCI to Dementia	Sebastian Gabriel Moguilner
1.3.	**Risk factors: gateway to prevention**	
a.	Comprehensive Overview of 14 Risk Factors for MCI and Dementia	Susanne Röhr
b.	Aging related hearing and vision loss - relations to cognitive decline	Iracema Leroi
c.	Vascular Risk Factors: Hypertension, Dyslipidaemia, Diabetes, Stroke, Individual factors	Ana Verdelho
d.	Emerging Risk Factors: Air Pollution, SARS-Cov-2 Infection and other Infections, and the Role of Vaccinations	Andrea Pilotto
1.4.	**Protective factors: gateway to prevention**	
a.	Healthy Eating Patterns for Cognitive Health	Cornel Sieber
b.	Promoting Physical Activity	Nicola Veronese
c.	Lifestyle Factors: Smoking, Alcohol, Drug Addiction, Trauma Brain Injury, and Sleep Quality	Maria Cristina Polidori
d.	The Role of Education and Cognitive Stimulation	Yaohua Chen
e.	Social Engagement: Activities and the Impact of Social Isolation	Brian Lawlor

MODULE 2: Clinical Assessment of Mild Cognitive Impairment

Coordinator: Dr Milica G. Kramberger

		Faculty:
2.1.	**Understanding Mild Cognitive Impairment in Clinical Practice**	Milica G Kramberger
2.2.	**Clinical presentation**	
a.	Diagnostic Criteria for Mild Cognitive Impairment	Kristian Steen Frederiksen
b.	Subjective Cognitive Decline: Recognition and Implications	Frank Jessen
c.	Clinical Presentation of MCI Across Various Neurodegenerative Conditions	Milica G Kramberger
d.	Neuropsychological Profiles of MCI and Early-Stage Dementia	Ester van den Berg
2.3.	**Comorbidities and Atypical Features**	
a.	Mood and Behavioural Disorders Associated with MCI	Burcu Balam Doğu
b.	Geriatric Presentations: The Comprehensive Geriatric Assessment (CGA) Approach	Francesco Mattace Raso
c.	Functional decline in MCI	Francesco Mattace Raso
2.4.	**Tools for Identification and Follow-Up:**	
a.	Screening Methods and Tools for Mild Cognitive Impairment	Federica Ribaldi
b.	Follow-Up Strategies and Prognosis in Mild Cognitive Impairment	Sebastiaan Engelborghs

MODULE 3: Diagnosis of Mild Cognitive Impairment

Coordinator: Dr Sebastiaan Engelborghs

		Faculty:
3.1.	**Basic Diagnostic Procedures:** Interviewing the Patient, Physical Examination, and Laboratory Findings	Francesco Mattace Raso
3.2.	**Structural Brain Imaging:** Magnetic Resonance Imaging (MRI)	Milica G Kramberger
3.3.	**Functional Brain Imaging Techniques:** FDG PET, Amyloid PET, and Tau PET	Arnoldo Piccardo
3.4.	**Fluid Biomarkers:** Understanding Cerebrospinal Fluid (CSF) Biomarkers	Sebastiaan Engelborghs
3.5.	**Counselling Strategies:** Pre- and Post-Biomarker Assessment, Timely Vs. Early diagnosis, and consequences	Kristian Steen Frederiksen

MODULE 4: Comprehensive Management Strategies for Mild Cognitive Impairment

Coordinators: Dr Pinar Soysal

		Faculty:
4.1.	**Introduction to Strategies for Managing MCI**	Kristian Steen Frederiksen; Yaohua Chen Pinar Soysal
4.2.	**Optimizing brain health in patients with MCI**	Yaohua Chen
	Multidomain Intervention: Nutrition, Exercise, Cognitive training, Social Activities, Vascular risk monitoring	Ruth Stephen
	a. **NUTRITION:**	
	a.1. Brain Energy Consumption in MCI: Brain glucose metabolism and brain ketone metabolism	Russell Swerdlow
	a.2.Diets for Therapeutic Effect on Cognitive Function: MIND diet, Mediterranean diet, and Ketogenic diet	Vincenza Gianfredi
	a.3. Neuroketotherapeutic interventions to enhance brain Energy: Medium Chain Triglycerides	Russell Swerdlow
	b. EXERCISE: Physical activity	Nicola Veronese
	c. COGNITIVE: Strategies and therapies for enhancing cognitive function	Hanna-Maria Roitto
	d. SOCIAL ACTIVITIES: Addressing Social Isolation and Loneliness for enhanced brain health	Brian Lawlor
	e. VASCULAR RISK MONITORING: Managing vascular issues and vitamin deficiencies for optimal brain health	Yaohua Chen
4.3.	**Treating patients with MCI**	Kristian Steen Frederiksen
	a. Addressing behavioural and psychiatric issues in MCI	Burcu Balam Dogu
	b. Addressing sleep issues in MCI	Sandra Gimenez
	c. Treatment of MCI due to Alzheimer's Disease (Antibody therapy)	Thibaud Lebouvier
	d. Treatment of MCI due to Dementia with Lewy Bodies	Kristian Steen Frederiksen
4.4.	**Monitoring patients with MCI**	Pinar Soysal
	a. Role of technologies, AI, monitoring	Walter Maetzler
	b. Considering the geriatric syndromes in patients with MCI: frailty, falls, polypharmacy, malnutrition	Pinar Soysal
	c. Counselling, education, research opportunities and follow-up in patients with MCI	Tomas Welsh