anosognosia; sixteen had anosognosia for memory items, fifteen showed anosognosia for non-memory items, and ten had anosognosia for both memory and non-memory items. Pearson's correlations showed that the total discrepancy and non-memory scores were significantly correlated with a measure of global cognitive ability (the Mini-Mental State Examination), abstract reasoning (Raven's Progressive Matrices), constructional apraxia (i.e., Rey-Osterrieth Figure – copy) and short-term memory (Digit Span and Corsi block-tapping test). Lower GM volume in fronto-limbic areas (i.e., the anterior cingulate and medial frontal gyrus) was also found to be associated with reduced general awareness. The memory subcomponent discrepancy scores only correlated with short-term memory and global cognitive ability, and were associated with lower GM volume in fronto-limbic areas and in subcortical structures (i.e., thalamus, caudate). **Conclusions:** This study demonstrates that anosognosia of cognitive and functional performance in amnestic MCI patients is associated with general cognitive impairment, memory dysfunction and lower GM volume in fronto-limbic and subcortical structures. These results support recent evidence according to which these anatomical regions are involved in reduced awareness and confirm the importance to delineate and further explore anosognosia of both memory and non-memory dysfunctions.

## P1-346 EFFECTS OF AEROBIC EXERCISE ON PROGRESSION OF HIPPOCAMPAL VOLUME AND COGNITION IN AMNESTIC MILD COGNITIVE IMPAIRMENT DUE TO AD

**Camila Vieira de Ligo Teixeira**[1], Thiago Junqueira Ribeiro Rezende[2], Thamires NC. Magalhães[1], Marina Weiler[3], Ana Flavia MKC Cassani[1], Debora Queiroz de Almeida[4], Thiago Quinaglia AC Silva[4], Helena Passarelli Giroud Joaquim[5], Leda Leme Talib[6], Orestes Vicente Forlenza[7], Mariana Pires Franco[8], Pedro Eduardo Nechio[4], Paula Fernandes[1], Fernando Cendes[1], Marcio Luiz Figueredo Balthazar[1], *[1]Unicamp, Campinas, Brazil; [2]UNICAMP, Campinas, Brazil; [3]National Institute of Health, Baltimore, MD, USA; [4]Unicamp, Campinas, Brazil; [5]Laboratory of Neuroscience (LIM-27), Institute of Psychiatry, Faculty of Medicine, Sao Paulo, Brazil; [6]Laboratory of Neuroscience (LIM-27), Department and Institute of Psychiatry, Faculty of Medicine, University of São Paulo, Sao Paulo, Brazil; [7]Laboratory of Neuroscience (LIM-27), Department and Institute of Psychiatry, Faculty of Medicine, University of São Paulo, São Paulo-SP, Brazil; [8]UNICAMP, Campinas, Brazil. Contact e-mail: cateixeira98@gmail.com*

**Background:** Increasing evidence demonstrates that physical exercise is an important modifiable factor not only for cardiovascular fitness, but also for brain health and dementia prevention. However, it is not clear how supervised physical exercise can affect cognition and biomarkers in patients with amnestic mild cognitive impairment (aMCI) due to Alzheimer's disease (AD). In this study, we aimed to evaluate six months of supervised aerobic training on hippocampus volume in aMCI subjects with CSF positive AD biomarkers (low $A\beta_{1\text{-}42}$ and/or low $A\beta_{1\text{-}42}$/p-tau). **Methods:** 19 aMCI (mean age of 70,6 ± 7,6 years old) subjects were diagnosed using the core criteria of the NIA/AA for MCI and presented positive CSF AD biomarkers. All patients underwent neurocognitive tests, which included Mini Mental State Examination (MMSE) and Rey Auditory-Verbal Learning Test, and a structural MRI at 3.0 Tesla. Hippocampal volume was analyzed using *FreeSurfer* software (https://surfer.nmr.mgh.harvard.edu/). A graded maximal exercise test on a motor-driven treadmill assessed aerobic fitness (measured by VO2maximun). Participants were divided into Aerobic group (AG, 9 patients with supervised exercise 3 times per week for 6 months) and control group (CG, 10 patients with non-supervised exercise). The groups were controlled for age, sex, and education. **Results:** General Linear Model for repetitive measures showed a significant improvement in aerobic fitness, indicating that while AG improved VO2maximun, CG decreased ($p<0.009$). CG presented a significant decrease in the MMSE, Right hippocampus volume and a tendency in left hippocampus volume ($p<0.033$, $p<0.05$, $p<0.082$, respectively), while these variables did not change in the AG over time. **Conclusions:** Six months of supervised aerobic exercise seems to be effective, not only for improving aerobic fitness, but also in maintaining global cognitive functions and hippocampus volume in aMCI subjects due to AD.

## P1-347 ASSOCIATION OF SELF-PERCEIVED PHYSICAL HEALTH WITH AMYLOID DEPOSITION IN COGNITIVELY NORMAL ADULTS AND SCD PATIENTS

Valentin Ourry[1,2], Julie Gonneaud[3], Clémence Tomadesso[2,4], Stéphanie Egret[2,5], Florence Mézenge[2,5], Claire André[6], Renaud La Joie[2,4], Audrey Perrotin[2,7], Vincent De la Sayette[7,8], Beatrice Desgranges[2,7], Gael Chetelat[1,2], **Eider M. Arenaza-Urquijo**[1,2], *[1]Inserm UMR-S U1237,UCN, GIP Cyceron, Caen, France; [2]Inserm-EPHE-UCN U1077, Caen, France; [3]Inserm-EPHE-UCN U1077, Caen, France; [4]Inserm UMR-S U1237, Université de Caen-Normandie, GIP Cyceron, Caen, France; [5]Inserm UMR-S U1237, UCN, GIP Cyceron, Caen, France; [6]Normandie Univ, UNICAEN, PSL Research University, EPHE, INSERM, U1077, CHU de Caen, Neuropsychologie et Imagerie de la Mémoire Humaine, Caen, France; [7]CHU de Caen, U1077, Caen, France; [8]Inserm-EPHE-UNICAEN U1077, Caen, France. Contact e-mail: eiderarenaza@gmail.com*

**Background:** There is increased recognition of the relevance of subjective feeling and self-perception in preclinical Alzheimer's disease (AD). For example, loneliness has recently been related to higher amyloid burden in cognitively normal older adults. Another important factor might be self-perceived quality of life (QoL) known to be related to neuropsychiatric symptoms in AD. Here, we investigated the clinical significance of a multi-dimensional QoL measurement by studying its relation with subclinical levels of anxiety and depression and with amyloid deposition in cognitively normal older adults and patients with subjective cognitive decline (SCD). **Methods:** Fifty-two normal older adults (age: 73 ± 7) and 18 SCD patients (age: 71± 8) underwent Florbetapir-PET scans and depression (Montgomery Scale), anxiety (STAI-B) and QoL (WHOQOL-BREF) assessments. The QoL questionnaire provided a total score and 4 additional sub-scores reflecting physical and psychological health, social and environmental dimensions of QoL. First, between groups differences were tested in QoL scores. Then, within the two groups, multiple regression models were