

## PHYSICAL ACTIVITY, NEURODEGENERATIVE AND METABOLIC DISEASES

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### Preparatory activities

*Learning objectives (200 characters max): Basic knowledge on the incidence, pathogenesis, symptoms of common neurodegenerative and metabolic disorders.*

*Online Learning resources:*

Reading material:

- Alzheimer's Disease International: World Alzheimer Report 2014 · Executive summary
- Alzheimer's disease facts and figures 2012. Alzheimer's & Dementia, 8 (2012), 131-168
- Alzheimer's disease facts and figures 2016. Alzheimer's & Dementia, 12 (2016), 459-509
- Bertram and Tanzi The genetic epidemiology of neurodegenerative disease. J Clin Invest. 2005 Jun;115(6):1449-57.
- American Diabetes Association. Classification and Diagnosis of Diabetes. Diabetes Care 2015; 38 (Supplement 1): S8-S16.
- Tuomi et al., The many faces of diabetes: a disease with increasing heterogeneity. Lancet. 2014; 383(9922): 1084-94.

### Core activities

*Learning objectives (200 characters max): Understand and discuss physical activity applications in primary and secondary prevention of neurodegenerative and metabolic disorders.*

*Learning resources:* Face-to-face classroom

*Online learning resources*

Lecturers' presentation

Reading material:

- Paillard T, et al. Protective Effects of Physical Exercise in Alzheimer's Disease and Parkinson's Disease: A Narrative Review. J Clin Neurol. 2015 Jul;11(3):212-9.
- Borrione et al., Effects of physical activity in Parkinson's disease: A new tool for rehabilitation. World J Methodol. 2014 Sep 26;4(3):133
- Wei et al., Low cardiorespiratory fitness and physical inactivity as predictors of mortality in men with type II diabetes. Ann Inter Med 2000;132:605-11.
- Tanasescu et al., Physical activity in relation to cardiovascular disease and total mortality among men with type II diabetes. Circulation 2003;107:2435-9.
- Myers et al., Exercise Capacity and Mortality among Men Referred for Exercise Testing. N Engl J Med 2002; 346:793-801
- ACSM/ADA Statement: Exercise and Type 2 diabetes. DIABETES CARE, 33, 12, 2692-2696, 2010.

