

## Master project 2021-2022

### Personal Information

<b>Supervisor</b>	Concepción Padilla
<b>Email</b>	cpadilla@santpau.cat
<b>Institution</b>	Sant Pau Hospital
<b>Website</b>	<a href="https://santpaumemoryunit.com/alzheimer-down-unit/">https://santpaumemoryunit.com/alzheimer-down-unit/</a>
<b>Group</b>	Alzheimer Down Unit

### Project

## Web development & bioinformatic tools

#### Project Title:

"Stretching out the boundaries of the neuropsychological evaluation of dementia in Down's syndrome: a smartphone application for the evaluation of Alzheimer's disease in Down's syndrome".

#### Keywords:

Mobile, Web-based, Applications, Neuropsychology, Evaluation

#### Summary:

This project aims to develop a reliable and valid screening cognitive test to detect early symptoms of Alzheimer's disease (AD) in Down's syndrome (DS). The nature of this instrument is, by definition, different from the ones currently administered in clinical or research settings, in the sense that it implies the use of mobile technology to monitor the participant in their natural environment, prompting them for the completion of a set of cognitive tests evaluating cognitive processes usually affected in AD. The main purpose of the cognitive tests will be the identification of significant intra-individual cognitive changes over time that may alert us of a transition from the preclinical symptomatic AD and make a case for bringing the patient to clinical settings for further examinations. This screening tool will facilitate monitoring of patients with DS participating in clinical trials.

#### References:

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**Expected skills::**

Programming skills to create mobile and web-based applications (IOS / Android - Swift), Java y backend (databases, web services). High level of English.

**Possibility of funding::**

No

**Possible continuity with PhD: :**

Yes

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