

# DetectASD

## Early detection of warning signs in the development of people with autism spectrum disorders

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The aim of the present project is to detect relevant warning signs in the development of children with autistic spectrum disorders (ASD) and to develop an Autism Risk Calculator that could be used in the regular pediatric revision of children among the first two years of life.

The increase of children with ASD during that last few years, together with the knowledge that the later the diagnosis the worst prognostic, highlight the importance of early detection of warning signs in the diagnosis and treatment of ASD. The detection instruments in ASD warning signs are usually applied after 18 months, but some studies confirm the existence of warning signs as early as 9 months of age. Therefore, we have developed a tool to assess early warning signs associated with the presence of ASD. This instrument is composed of various protocols using evolutionary traits observation, depending on the age of the child (from 4 to 24 months), which will be implemented by primary care pediatricians in routine visits. The studied evolutionary traits are related to altered areas in the population with ASD: communication, social interaction, symbolic capacity, sensory disturbances and motor development, and adaptive behaviors.

Once the sample collection will be finished, we will proceed to the validation of protocols. We hope that observational protocols contain items that are good predictors of children with ASD. In this case, we would have a tool that could implement primary care pediatricians, caregivers and even parents, to enable early detection and warning signs in children with ASD. Early detection will ensure a higher quality of life for people affected by ASD and their families. At the same time, it will promote early intervention, which brakes the most devastating consequences of autism and prevent economic and social costs, which would be higher the later the disorder is detected.

The implementation of such protocols also allow assessing the actual incidence of children born with ASD, specifically in the geographical areas of Tarragona and Santa Cruz de Tenerife, and obtaining accurate information about the most significant evolutionary aspects of this population, which will involve important practical implications for treatment and development of early intervention programs that lead to a better prognosis.