

# ENVIRONMENTAL CONTAMINANTS A REAL CHALLENGE FOR CHILDHOOD AND ELDERLY: THE LINK BETWEEN INFLAMMATION AND BEHAVIORAL OUTCOMES (I-BREATH)

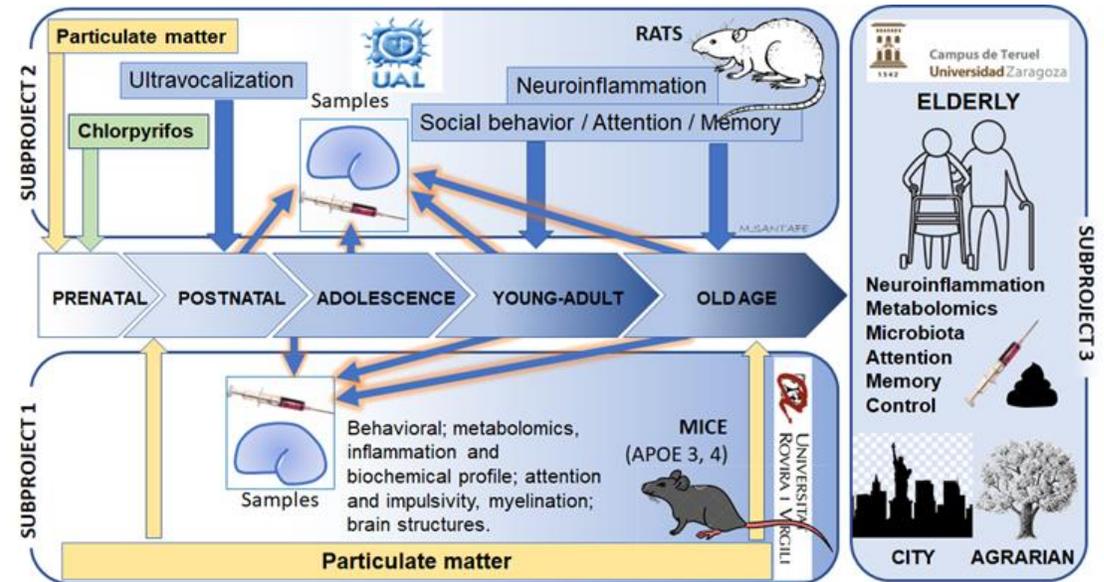
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Epidemiological data point towards serious implications of air pollution and particulate matter (PM) exposure on neurodevelopmental disorders and neurodegeneration.

**Objective:** to assess the effects of PM exposure during early development and as adults on neurodevelopment, cognitive and emotional disruption and to assess the implication of inflammation and oxidative stress.

We have designed three subprojects to assess: i) prenatal PM exposure ii) Postnatal early exposure to PM and /or adult exposures to PM in a humanized transgenic mouse model for the human apoE alleles and iii) elderly human population real exposure to PM in urban and rural.

Results will allow us to: 1) identify specific pathways for behavioral alterations related to PM exposure; 2) study connections between early life exposures and neurodegeneration; 3) increase information about sex differences in developmental disorders and aging and 4) suggest recommendations at both prevention and intervention levels



Budget: 121.000 Ref: PID2020-113812RB-C31

