



MUSE - Monitoring Urban Health and Environment

In the same vein as its cooperation with IMREDD, the Metropole Nice Côte d'Azur and the UCA share a goal to **reinvent the medicine of the future and sustainable health**. The MUSE project (Monitoring Urban Health and Environment) perfectly illustrated the dynamics of an ecosystem partnership.

Lead by the IDEX Health reference centre, the work of the **MUSE (Monitoring Urban Health Environment) project** will focus on **collecting and using air quality data** from various sensors, and data used as indicators of poor health (genes, acute conditions, drug use) as well as communication methods and tailored support. The first phase will take place in Les Moulins district, in Nice, which has an extensive network of sensors. The project will then be extended to old people and patients who have been prescribed adapted sporting activities.

The issues are as follows:

- 1) **Improve the characterisation of air pollution exposure** in an urban district or with individual subjects
- 2) **Identify the relevant interactive health monitoring which is most suited** to providing care for vulnerable people affected by air quality (indoors and outdoors)
- 3) **Identify necessary data unrelated to health and air quality:** lifestyle, sociology
- 4) Develop collaborative **air quality monitoring methods** (multi-modal approach including smartphone apps)
- 5) **Deploy air quality monitoring** (multi-modal approach) with different target communities (Les Moulins district), as well as the elderly, and chronically ill patients following a tailored sports programme.
- 6) **Assess the use of the monitoring** (feasibility, ownership) and the impact of information services (behavioural changes)
- 7) **Develop a decision-making and management tool for local authorities** that can be transposed to other administrative areas

Objectives:

- **Set up a multi-model monitoring system for air quality (smart monitoring) with different vulnerable sections of the population (districts, old people, patients)**

Key figures



€306,160

Total project cost

Joint funding

- > **IDEX:** €90,000
- > **UCA (University Hospital):** €38,000
- > **Industry (Engie, Terra):** €50,000
- > **Other (ARS, CR PACA):** €128,160



Schedule

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2018
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2017
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**Project running for 12 months
From March 2017 to March 2018**

PARTNERS

- > **Academia:** CHU, laboratory of pharmaceutical care and public health (L2SP), UNS/IMREDD (Espace, URE transitions laboratories)
- > **Manufacturers** Terra, Observia, Engie Ineo
- > **Others:** Pôle de Santé des Moulins-Méridia (PS3M), Association Prévention de la Pollution Atmosphérique (APPA), Azur Sport Santé, Air PACA, Comité Régional d'éducation pour la Santé (CRES PACA), Ville de Nice (Direction Santé, Direction Environnement)



PROJECT LAUNCHED